

PSYCHOLOGICAL ABSTRACTS

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CONTENTS

General (incl. Statistics).....	2439-2474
Nervous System.....	2475-2494
Receptive and Perceptual Processes.....	2495-2536
Learning, Conditioning, Intelligence (incl. Attention, Thought).....	2537-2550
Motor and Glandular Responses (incl. Emotion, Sleep).....	2551-2575
Psychoanalysis, Dreams, Hypnosis.....	2576-2590
Functional Disorders.....	2591-2645
Personality and Character.....	2646-2662
General Social Processes (incl. Esthetics).....	2663-2716
Crime and Delinquency.....	2717-2726
Industrial and Personnel Problems.....	2727-2764
Educational Psychology (incl. Vocational Guidance).....	2765-2828
Mental Tests.....	2829-2844
Childhood and Adolescence.....	2845-2872

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AUTHOR INDEX

- Ackerly, S., 2845
Adams, F. J., 2838
Adrogue, E., 2495
Ai, W., 2765, 2766, 2767
Alexander, F., 2576
Allen, F., 2496
Allport, F. H., 2646
Alpert, A., 2846
Ames, V. C., 2847
Anderson, C. M., 2591
Angulo y Gonzales, A. W., 2475
[Anon.], 2439, 2440, 2441, 2442, 2443, 2497, 2592, 2663, 2664, 2727, 2728, 2829
Ansbacher, H. L., 2444, 2768
Arey, A. F., 2868
Averill, L. A., 2445, 2868
- Baird, H., 2593
Bard, P., 2484
Barhash, A., 2864
Bastide, R., 2577
Bavelas, A., 2549
Baxter, R. C., 2570
Bayton, J. A., 2665
Beach, F. A., 2476
Beaglehole, E., 2594
Beebe-Center, J. G., 2551
Beerman, H., 2641
Bellak, L., 2537
Bellows, R. M., 2810
Bender, L., 2848
Bender, M. B., 2574
Bennett, B., 2666
Benson, L. E., 2667
Berens, C., 2498
Berg, R. L., 2551
Berger, A., 2830
Berger, W., 2596
Bernatzik, H. A., 2668
Bills, M. A., 2729
Bisler, L. E., 2868
Blanchard, E. L., 2508
Bogardus, E. S., 2669
Bolles, M., 2697
Bond, E. A., 2868
Bonney, M. E., 2647
Bordin, E. S., 2825
Borel, A., 2597
Bowen, B. D., 2862
Bowen, M., 2849
Bowers, E. V., 2831
Bradley, C., 2598, 2849
Brickner, R. M., 2599
Bridgen, R. L., 2850
Britt, S. H., 2670, 2730
Brody, M. B., 2832
Broom, M. E., 2781
Brown, B. D., 2816
Brown, S. F., 2600
Brucke, E. T. v., 2477
Brugger, C., 2601
Bruner, H. B., 2769
Bryan, A. I., 2671
Bryant, G. E., 2672
Burk, S. L. H., 2731
Burks, B. S., 2673
Burling, T., 2732
Burt, C., 2833
Buyse, R., 2770
- Calandra, A., 2771
Campbell, K. H., 2520
Cappeller, R., 2851
Carlson, W. A., 2733
Carmichael, L., 2734
Chamberlain, H. E., 2602
- Charles, J. W., 2868
Chao, F., 2852
Chao, M. H., 2735
Chen, H. H., 2772
Children's Bureau, U. S. Department of Labor, 2717
Chou, H. C., 2773
Ciocco, A., 2674
Clark, W. W., 2648, 2660
Cleckley, H., 2603
Cole, F. C., 2675
Cooper, A. M., 2736
Coriat, I. H., 2578
Cornell, E. L., 2737
Crisin, M. de, 2604
Crook, G. H., 2478
Crossley, A. M., 2676
Crow, L. D., 2868
Cutner, H., 2677
- Dalziel, C. F., 2499, 2552, 2553
Dantlin, J., 2649
Darley, J. G., 2774
Davies, F. R. J., 2841
Davis, E. D. D., 2500
Davis, H., 2480
Davis, P. A., 2479, 2480
Davy, G., 2678
Decker, D. D., 2738, 2739
Delacroix, H., 2679
DeMand, J. W., 2538
Denney, H. R., 2775
Denny-Brown, D., 2446
D'Esopo, D. A., 2697
Diringshofen, H. v., 2740
Dobson, M., 2554
Dolkart, M. B., 2637
Dooley, L., 2579
Drake, R. M., 2868
Dudycha, G. J., 2650
Duel, H. W., 2780
Dulsky, S. G., 2539
Dunlap, K., 2447
Dunmire, H., 2853
Dusser de Barenne, J. G., 2487
D. W., 2555
- Early, M., 2477
Eckardt, R. E., 2501
Edwards, A. L., 2680
Eisenson, J., 2866
Erickson, M. H., 2605
Evans, J. J., Jr., 2741
- Fan, P. S., 2766
Fan, T. T., 2767
Farnsworth, P. R., 2681
Faubion, R., 2747
Faulkner, R., 2776
Fauré-Frémiet, P., 2448
Fendrick, P., 2682
Fenichel, O., 2556
Ferguson, G. A., 2449
Ferguson, L. W., 2683
Fervers, C., 2606
Figuerido, C. A., 2777
Finesinger, J. E., 2567, 2607
Finley, M. H., 2778
Fisher, R. A., 2450
Forbes, A., 2477
Forgione, J. D., 2854
Forster, M., 2540
Fox, E., 2855
Foxe, A. N., 2557, 2580
Frankel, M. N., 2662
Frederiksen, N., 2646
Freeman, G. L., 2451
- Freeman, H., 2491
French, T. M., 2651
Freud, S., 2581
Freund, H., 2608
Fryer, D., 2742
Fuchs, E. F., 2743
- Gage, N. L., 2808, 2809
Galambos, R., 2502
Gardner, G. E., 2718
Gardner, I. C., 2558
Gardner, W. A., 2503
Geldreich, E. W., 2559
German, W. J., 2492
Gibbons, C. C., 2779
Gibbs, F. A., 2480
Giberson, L. G., 2744
Gibson, K. S., 2504
Gilbert, J. G., 2541
Gobey, J. T., 2560
Goldman, R., 2637
Goldstein, K., 2609
Gomez Robleda, J., 2684
Gonda, V. E., 2610
Goodell, H., 2505, 2534
Goodman, A. W., 2611
Gosnell, H. F., 2685
Gragg, D. B., 2838
Graham, C. H., 2522
Gregory, W. S., 2686
Gresson, R. A. R., 2651
Griffiths, B., 2856
Groves, E. R., 2687
Grutzner, W., 2778
Guilford, J. P., 2452
- Hackman, R. B., 2780
Hackner, F., 2822
Handchin, S., 2632
Handy, L. M., 2725
Hansen, K., 2596
Hardaway, M., 2781
Hardy, A. C., 2531
Hardy, J. D., 2505, 2534
Harman, H. H., 2453
Harpman, J. A., 2535
Harrell, W., 2745, 2746
Harriman, P. L., 2868
Harrington, M., 2612
Harrington, P. L., 2868
Harrington, M., 2612
Hart, E. B., 2688
Hart, H. N., 2688
Hartson, J. J., 2857
Haynes, B. R., 2781
Healy, W., 2719
Henrikson, E. H., 2689
Herring, J. P., 2834
Heun, E., 2613
Hewlett, T. C., 2782
Hirschberg, M., 2720
Hissong, C., 2868
Hoffman, E. L., 2451
Hogben, L., 2506
Holm, E., 2507
Horton, C. W., 2783
Hovland, C. L., 2569
Hoyt, C. J., 2454
Hsiao, H. H., 2542, 2835
Hwang, I., 2784
- Ibarrola, R., 2747, 2785
- Jackson, R. W. B., 2786, 2787
Jacobsen, O. I., 2690
Jacobson, E., 2481
Jastrow, J., 2582
Jeans, P. C., 2508
Jeffres, S., 2838
- Jetter, W. W., 2480
Johnson, L. V., 2501
Jong, H. de, 2614
Jongbloed, J., 2543
Joussain, A., 2691
- Karlin, J. E., 2692
Karlin, J. W., 2615
Karslake, R., 2809
Kasanin, J., 2652
Katonak, L. J., 2753
Katz, D., 2693
Kaufman, M. R., 2583
Kaufman, S. H., 2638
Kellett, C. E., 2562
Kelly, G. A., 2694
Kelly, G. A., 2544
Kempston, E. W., 2748
Kendall, M. G., 2455
Kennedy, F., 2456
Kintner, G. F., 2509
Kisker, G. W., 2616
Kloppsch, O. Z., 2739
Knigge, F., 2617
Knight, P. E., 2788
Knisely, A. W., 2570
Knower, F. H., 2695
Komarovskiy, M., 2696
Korb, M., 2485, 2486
Kovitz, B., 2631
Kroh, O., 2458
Kruta, V., 2510
Kubie, L. S., 2563
Kuder, G. F., 2814
Kuljzenko, A., 2618
Kuo, Z. Y., 2459
Kvaraceus, W. C., 2837
- Lagen, J. B., 2499, 2552, 2553
Landahl, H. B., 2545
Landecker, W. S., 2721
Lander, J., 2722
Landgrebe, F., 2506
Landis, C., 2697, 2749
Laner, A. R., 2750
Larkey, S. V., 2460
Lennox, W. G., 2619
Lewin, B. D., 2620
Liebman, M., 2584
Lijó Pavia, J., 2511
Lindesmith, A. R., 2723
Lindquist, E. F., 2789
Line, W., 2461
Ling, B. C., 2858
Lippman, H. S., 2864
Littler, T. S., 2512
Lloyd, D. P. C., 2482
Lodberg, C. V., 2507
Loeser, J. A., 2564
Loop, A. S., 2790
Lord, F. E., 2859
Lossart, E., 2791
Lotmar, F., 2621
Loucks, R. B., 2462
Lu, T., 2493
Luckey, B. M., 2463
Ludvig, E., 2513, 2514
Luh, C. W., 2466
Lull, P. E., 2698
Lurie, L. A., 2860
Lyerly, J. G., 2644
- Macaulay, M., 2861
Mailoux, N. M., 2622
Malamud, W., 2565
Mallart, J., 2785
Mann, T., 2464
Manuel, H. T., 2838
Marshall, W. H., 2483, 2484
Marston, W. M., 2653
Martin, H. G., 2515
- Mason, H., 2792
Mata, L., 2751, 2793
Mátri, L., 2546
Mazick, S. G., 2607
McCann, W. H., 2566
McClusky, H. V., 2794
McDonald, C. A., 2485, 2486
McGavin, A. P., 2862
McGlothlin, L. E., 2804
McGraw, M. B., 2863
McKeon, C. C., 2636
McMurray, R. N., 2752
McQuitty, L. L., 2654
Mecklin, J. M., 2655
Meier, N. C., 2699
Meister, R. K., 2842
Mellor, R., 2845
Meneffe, S. C., 2670
Menninger, K. A., 2585
Mercer, M., 2795
Middleton, W. C., 2656
Milling, C. J., 2623
Missriegler, A., 2624
Mitchell, M. B., 2839
Mohr, P., 2625
Montgomery, R. B., 2821
Moore, J. E., 2796
Moore, M., 2626
Mosier, C. I., 2700
Mountcastle, H. W., 2465
Mozes, E. B., 2753
Munro, R., 2599
Munro, T., 2797, 2798
Munson, G., 2799
Murphy, B. J., 2864
Murphy, J. P., 2487
Murray, J. M., 2596
Myers, G. E., 2800
Myslakowski, E., 2801
- National Bureau of Publications, 2466
Nemzek, C. L., 2802
Newburger, M., 2622, 2860
Nickerson, D., 2504, 2516
Nielsen, J. M., 2627
Nutt, R. H., 2547
- Oberndorf, C. P., 2517
Older, H. J., 2701
Orgel, S. Z., 2724
O'Rourke, L. J., 2754
Otuka, J., 2518
Outcalt, L. C., 2860
- Palm, G., 2467
Pan, S., 2803
Pattie, F. A., Jr., 2587
Pearson, N. M., 2685
Peck, L., 2804
Peddie, W., 2519
Peden, G. W., 2862
Pellett, R., 2865
Pennington, L. A., 2488
Peterson, J. C., 2468
Pfaffmann, C., 2489
Pillely, J. G., 2805
Pintner, R., 2840, 2866
Plessett, R., 2806
Plessett, I. R., 2725
Powell, N. J., 2755
Price, H. H., 2588
- Rado, S., 2628
Ragsdale, C. E., 2868
Ralph, J., 2657
Rapaport, D., 2631
Rashevsky, N., 2702
- Rawlins, F. I. G., 2703
Redmond, M., 2841
Reed, H. O., 2807
Rees, J. R., 2629
Remmers, H. H., 2775, 2808, 2809
Rennie, T. A. C., 2630
Reymert, M. L., 2842
Richards, T. W., 2843
Richardson, M. W., 2844
Richter, C. P., 2520
Riddell, W. J. B., 2521
Rife, D. C., 2558
Riggs, L. A., 2522
Riden, G., 2868
Rivas, M. P., 2833
Robb, R. W., 2631
Robinson, J. B., 2810
Robinson, L. J., 2490
Rochon-Duvigneaud, A., 2523, 2524, 2525, 2526
Roeder, K. D., 2527
Rogers, M. M., 2811
Roggenbau, C. H., 2632
Roper, E., 2704
Rosanoff, A. J., 2725
Rosenthal, F. M., 2860
Rosner, A. A., 2599
Rothschild, D., 2633
Royer, E. B., 2469
Rubin, M. A., 2491
Rucknick, C. A., 2528
Ruesch, J., 2567
Rugg, D., 2705
Ruiz-Castillo, L., 2785
- Sachs, H., 2658
Saffir, M. A., 2756
Sanders, F. K., 2548
Satterthwaite, F. E., 2508
Savitsky, N., 2634
Scantlebury, R. E., 2568
Scates, D. E., 2812
Schettler, C., 2659
Schiff, P., 2726
Schiller, P. v., 2470
Schultz, E., 2862
Schultz, J. H., 2635
Schwab, R. S., 2567
Schwartz, L. A., 2859
Schwartz, M., 2496
Sears, R. R., 2569
Seashore, H., 2549
Seidman, J. M., 2764
Selfridge, G., 2529
Selling, L. S., 2757, 2758
Semrad, E. V., 2636
Seyler, E. C., 2813
Shakow, D., 2637
Shanner, W. M., 2814
Sharp, M. L., 2633
Sharp, W. R., 2706
Shartle, C. L., 2759
Shaw, W. C., 2471
Shen, E., 2815
Sheppard, E. H., 2760
Shulman, E., 2826
Shulman, E. E., 2600
Sieves, C. H., 2816
Sipola, E. M., 2550
Silver, E. H., 2750
Simon, B., 2638
Skard, A. G., 2867
Skinner, C. E., 2868
Smith, J. J., 2761
Smith, J. J., 2868
Smith, K. U., 2530
Snyder, L. H., 2570
Sobel, A. E., 2615
- Sones, A. M., 2841
Speer, G. S., 2841
Spencer, D. K., 2841
Sperry, R. W., 2841
Sprague, G. S., 2841
Stanton, M., 2841
Stein, L., 2707
Stieglitz, E. J., 2841
Stimson, M., 2841
Stites, R. S., 2841
Stokes, J. H., 2841
Stonor, C. R., 2841
Straub, J. H., 2841
Stroud, J. B., 2841
Stuckrath, F., 2841
Stuit, D. B., 2841
Symonds, P. M., 2841
- Tan, Y. E., 2841
Tarachow, S., 2841
Tchang, T. M., 2841
Thorndike, E. L., 2841
Thorne, L. P., 2841
Tiegs, E. W., 2841
Timberlake, J., 2841
Tinkelman, S., 2841
Tinker, M. A., 2841
Tomlinson, B. E., 2841
Tomlinson, H., 2841
Traxler, R. S., 2841
Trowbridge, L., 2841
Turner, R. S., 2841
Turse, P. L., 2841
Tyler, I. K., 2841
Tyler, J. C., 2841
- [Various], 2841
Várkonyi, H., 2841
Verrier, M., 2841
Villar, M., 2841
Vogel, F., 2841
- Wang, G., 2841
Watson, G., 2841
Weddell, G., 2841
Weigert, F., 2841
Weigl, E., 2841
Weimer, H., 2841
Weinbach, A., 2841
Weinstein, E., 2841
Wesley, M. W., 2841
Weymouth, A., 2841
Wilke, W. H., 2841
Williamson, E., 2841
Willis, E. E., 2841
Winch, R. F., 2841
Winslow, C. N., 2841
Wittmer, H., 2841
Wittels, F., 2841
Wolff, H. G., 2841
Wollan, K. L., 2841
Wood, A. B., 2841
Wood, L., 2841
Woods, R. C., 2841
Woollard, H., 2841
Woolsey, C. N., 2841
Worchel, P., 2841
Wright, W. D., 2841
Wu, L. T., 2841
- Yamazaki, S., 2841
Yates, F., 2841
Young, C. W., 2841
Young, G. M., 2841
Young, P., 2841
- Zachry, C. B., 2841
Zeeleny, L. D., 2841
Zipf, G. K., 2841
Zulliger, H., 2841

PSYCHOLOGICAL ABSTRACTS

VOL. XV, No. 6

JUNE, 1941

GENERAL (incl. Statistics)

2439. [Anon.] **Morris S. Viteles.** *J. consult. Psychol.*, 1941, 5, 49.—Portrait.

2440. [Anon.] **Paul Schilder, M. D.** *J. nerv. ment. Dis.*, 1941, 93, 548-552.—Obituary and portrait.—*M. Keller* (Butler Hospital).

2441. [Anon.] **Dr. R. J. Lythgoe.** *Nature, Lond.*, 1940, 146, 190.—Obituary.—*F. W. Finger* (Brown).

2442. [Anon.] **A new measure for aniseikonia.** *Optom. Wkly*, 1941, 32, 132.—Description of the American Optical Eikonometer for measuring the relative size of the two ocular images.—*D. J. Shaad* (Detroit, Mich.).

2443. [Anon.] **Paul F. Schilder, M. D.** *Psychol. Anal. Rev.*, 1941, 28, 300-301.—Obituary.—*G. Brighthouse* (Occidental).

2444. **Ansbacher, H. L. [Ed.] Psychological Index; abstract references of volumes 1-25, 1894-1918.** Evanston, Ill.: American Psychological Association, Northwestern University, 1941. Pp. ix + 241. \$2.50.—One or more abstracts have been found for 40% of the 66,580 titles listed in the *Psychological Index*, 1894-1918. In the present book references to these abstracts are listed in such a manner that given the volume and number of a title in the *Index*, one can find journal, volume, and page where an abstract of this title has appeared in any of 23 journals. This, together with a previous part (see XIV: 3301), facilitates the location of abstracts of psychological literature for the period prior to the foundation of the *Psychological Abstracts* in 1927, beginning with 1894. The work was done by the Psychological Index project of the WPA.—*H. L. Ansbacher* (Brown).

2445. **Averill, L. A. Reminiscences of a psychologist.** *Educ. Forum*, 1941, 5, 169-179.—(*Educ. Abstr.* VI: 304).

2446. **Denny-Brown, D. Sir Henry Head, F. R. S.** *Nature, Lond.*, 1940, 146, 583-584.—Obituary.—*F. W. Finger* (Brown).

2447. **Dunlap, K. The historical method in psychology.** *J. gen. Psychol.*, 1941, 24, 49-62.—Psychology has neglected the historical method (by which the author means the history of psychology), at least in the sense of applying it thoroughly and adequately to a group of problems. Comprehensive historical works in psychology should be of 2 types: the history of experimental psychology (human and animal) and the history of concepts, principles, and postulates of general psychology. A competent history of the 1st type is not available; of the 2nd

type the books written may be divided into 5 categories for each of which the author presents an example. The requirements of the historian in this field are severe: good training in psychology, language training appropriate to the period in the study of which he is to specialize, and an understanding of the general culture of the period. The concluding paragraphs describe some of the writer's experiences in his attempts to interpret the psychology of the ancient Greeks.—*C. N. Cofer* (George Washington).

2448. **Fauré-Frémiet, P. La re-création du réel et de l'équivoque.** (The re-creation of the real and the equivocal.) Paris: Alcan, 1940. Pp. 256. Frs. 45.—These are reflections on problems of psychology and esthetics, analyzed by introspection alone. As factors determining the experience of reality the following are treated. (1) A memory is a work of art. We cannot believe in a fact without mentally re-creating it. (2) Imagination is surrounded with a halo of memories. To realize one's aspirations and to realize mentally an image of the universe are two aspects of the same effort. Self-sacrifice may be a means of self-realization. Further problems dealt with are: (3) the representation of the universe in primitive societies; (4) the world of the artist and the essence of poetry; (5) mystical and para-mystical experience.—*C. Nony* (Sorbonne).

2449. **Ferguson, G. A. The application of Shepard's correction for grouping.** *Psychometrika*, 1941, 6, 21-27.—This paper attempts to show in a non-mathematical way the influence of grouping on standard deviations and correlations, and advances empirical evidence to illustrate with what accuracy values obtained from ungrouped data when the distributions are continuous. This enquiry gained its initial stimulus from the observation that many standard deviations and correlations reported by students of psychology and education are uncorrected for grouping and that frequently errors attributable to the grouping of data are not small when compared with errors of sampling.—(Courtesy *Psychometrika*).

2450. **Fisher, R. A. The precision of discriminant functions.** *Ann. Eugen., Camb.*, 1940, 10, 422-429.—Fisher points out that a standard error cannot be assigned to a single coefficient in a multiple regression equation or formula, although partial standard errors can be determined, provided fixed values are assigned to the other betas. He proposes, therefore, a test of significance as to whether any alternative formula proposed is significantly contradicted by the data.—*J. W. Dunlap* (Rochester).

2451. **Freeman, G. L., & Hoffman, E. L. An electrical integrator for "action currents."** *Rev. sci.*

Instrum., 1940, 11, 283-284.—This paper describes an apparatus for integrating, directly and without resort to translation from photographic records, the total electrical disturbance developed by body tissues. The amplified action currents accumulate as charges on a condenser until a given amount is reached, whereupon they are discharged by a gas-filled tube to activate an impulse counter.—*H. L. Ansbacher* (Brown).

2452. Guilford, J. P. The phi coefficient and chi square as indices of item validity. *Psychometrika*, 1941, 6, 11-19.—Two new methods of item analysis are described. One involves the computation of the ϕ coefficient (correlation of a fourfold point distribution) and the other involves chi square. The only data required are the proportions of passing individuals in the upper and lower criterion groups, for the determination of ϕ , and in addition, N , for the determination of chi square. Abacs are presented for graphic solution of the two indices of validity, and tests of significance are provided.—(Courtesy *Psychometrika*).

2453. Harman, H. H. On the rectilinear prediction of oblique factors. *Psychometrika*, 1941, 6, 29-35.—The general problem of estimating correlated or uncorrelated factors is treated. It is specifically indicated wherein the prediction of oblique factors differs from that of orthogonal factors. A shortened method of estimation of correlated factors is developed.—(Courtesy *Psychometrika*).

2454. Hoyt, C. J. Note on a simplified method of computing test reliability. *Educ. psychol. Measmt.*, 1941, 1, 93-95.—This is a description of a simplified procedure for computing the coefficient of reliability by the method of rational equivalences which is claimed to be more advantageous than the split-half methods. A variant of the Kuder-Richardson formula (20) is suggested.—*P. S. de Q. Cabot* (Simmons).

2455. Kendall, M. G. The derivation of multivariate sampling formulae by symbolic operation. *Ann. Eugen., Camb.*, 1940, 10, 392-402.—This is a systematic investigation of the determination by the combinatorial method of sampling moments, beginning with univariate formulae and working to the sampling moments for multivariate formulae. While the method is relatively simple, considerable care must be exercised not to omit terms in generating more complicated formulae.—*J. W. Dunlap* (Rochester).

2456. Kennedy, F. Sir Henry Head. *J. nerv. ment. Dis.*, 1941, 93, 276-277.—Obituary.—*M. Keller* (Butler Hospital).

2457. Kennedy, F. The inter-relationship of mind and body. *Philosophy, Lond.*, 1940, 15, 417-428.—Early thought conceived of structure as antithetical to force, and from this deviation of the universe sprang the dichotomy of mind and body. Now, however, "we regard mass as precipitated power and believe that in organisms that are vital . . . function and urgent need precipitates and patterns structure; this in turn transmits energy,

and at the same time ordains much of its character and final expression. . . . The body is a nexus of consciousness, of which the brain is the essential switchboard, and mind is to the body as the function of Sight is to the eye."—*F. W. Finger* (Brown).

2458. Kroh, O. Friedrich Fröbel als völkischer Erzieher. (Friedrich Fröbel as national educator.) *Z. pädag. Psychol.*, 1940, 41, 197-220.—Kroh discusses Fröbel's place in the history of German thought, his theories and methods, and his importance for Nazism.—*M. E. Morse* (Baltimore).

2459. Kuo, Z. Y. [Myself and psychology.] *Lit. Dig.* (Chinese), 1940, Wartime Issue No. 68/69, 1507-1508.—The author relates briefly his change and progress of thought in the past 20 years. His earliest psychological writings were largely philosophical and theoretical; then he became an extreme behaviorist, emphasizing physiology; and lastly, by 1930, he turned to physio-embryology, the major problems of which are briefly stated. The author believes that his relation with psychology has probably ended.—*C. F. Wu* (Chengtu).

2460. Larkey, S. V. The Division of Medical Sciences of the National Research Council and national defense. *Science*, 1941, 93, 241-244.—*F. A. Mote, Jr.* (Connecticut).

2461. Line, W. William McDougall, 1871-1938. *Amer. J. Psychiat.*, 1940, 97, 633-649.—A review of McDougall's development, of his systematic position, and his contributions to psychology and psychiatry.—*R. Goldman* (Boston Psychopathic Hospital).

2462. Loucks, R. B. The contribution of physiological psychology. *Psychol. Rev.*, 1941, 48, 105-126.—The issue raised by B. F. Skinner's assertion that "no fact of the nervous system has as yet told anyone anything new about behavior" concerns the merits of a psychology of external behavior versus one of internal behavior. The behavioristic bias, that the former is more easily observed, is false. Measurements are no more exact, and important links in the causal series are left out. There is no rational point of division between external and internal behavior. A correlation between them is essential to completed research, and this need not wait upon "a rigorous description at the level of behavior." The modern sophisticated psychologist is not justified in an elaborate emphasis on the overt aspects of thinking, emotion, attention, and sensing. An example is symbolic behavior at the level of the delayed response, which goes beyond simple conditioning and requires the assumption of a correlation between the overt choice and some entity of the neurophysiological substrate. Limitations of knowledge about the nervous system, due to the recency of adequate techniques, do not justify abandoning the internal approach; many aspects of behavior can never be understood through any other approach.—*A. G. Bills* (Cincinnati).

2463. Luckey, B. M. Résumé of Pennsylvania round table on licensing of psychologists. *J. consult. Psychol.*, 1941, 5, 78-79.—*P. S. de Q. Cabot* (Simmons).

2464. Mann, T. **Freud's position in the history of modern culture.** *Psychoanal. Rev.*, 1941, 28, 92-116.—Freud belongs in the series of writers of the 19th and 20th centuries who oppose the rationalism, intellectualism, and classicism of the 18th century. Psychoanalysis is a part of the general retrogressive movement of our times, a movement which makes progress through reaction, by forcing us back into a consideration of powerful, older ways of thought. The affront to academic psychology carried in the Freudian phrase "unconscious life of the soul" is comparable to the biological insult offered by Darwin, and to the cosmological insult given by Copernicus.—G. Brighouse (Occidental).

2465. Mountcastle, H. W. **Dayton Clarence Miller.** *Science*, 1941, 93, 270-272.—Obituary.—F. A. Mole, Jr. (Connecticut).

2466. **National Bureau of Publications.** [General psychological terms translated into Chinese.] Shanghai: Commercial Press, 1939. Pp. 83. \$1.20 Mex.—2755 general psychological terms, adopted mainly from H. C. Warren's *Dictionary of psychology* and H. B. English's *A student dictionary of psychological terms*, have been translated into Chinese and arranged alphabetically. The editorial board (22 members) was headed by C. W. Luh of Yenching University. Index of Chinese-English equivalents.—C. F. Wu (Chengtu).

2467. Palm, G. **Friedrich Froebel, der Mensch, Denker und Erzieher.** (Friedrich Froebel, the man, the thinker, and the educator.) Leipzig: Teubner, 1940. Pp. 243. RM 6.40.—[Abstracted review; original not seen.] This introduction to Froebel's life and work is composed of excerpts from his writings, so arranged that they form an integrated whole. An account of his development is followed by a comprehensive presentation of his views on man and life and his writings on education.—M. E. Morse (Baltimore, Md.).

2468. Peterson, J. C. **Further observations concerning centripetal drift.** *Trans. Kans. Acad. Sci.*, 1940, 43, 349-354.—Examples of centripetal drift (Galton's regression) in recently published psychological studies are given. Possible means of avoiding the vitiating effect of this phenomenon are surveyed.—W. A. Varvel (Chicago).

2469. Royer, E. B. **A machine method for computing the biserial correlation coefficient in item validation.** *Psychometrika*, 1941, 6, 55-59.—A method for computing the biserial correlation coefficients with the aid of punch card equipment is outlined. A numerical example and a work sheet layout is included in the presentation.—(Courtesy *Psychometrika*).

2470. Schiller, P. v. **A lélektan feladata.** (The task of psychology.) Budapest: Philosophical Library of the Hungarian Academy of Science, 1940. Pp. 315.—Part I criticizes the mental psychology of Aristotle, Descartes, Wundt, Brentano. Mental events are factors in action and must be understood as to their functions in directing behavior.

Part II shows how the interest in the more fruitful fields of motivation developed. American psychology (functionalism, behaviorism, purposivism) brought the dynamic, European psychology (Piaget, Bühler, Köhler, Lewin), the holistic view. Behavior cannot be reduced to stimulus-response relations. The physiological state of an organism and its environmental history create a situation, out of which behavior, i.e. a changing of the situation, follows. Behavior occurs in a field of forces which tend to effect an assimilative adjustment. This assimilative drive lends a relative meaning to actual needs, which in turn creates a hierarchy of life processes. Realization of the coherence of these factors allows a reconstruction of the whole organization out of some natural parts, if their function is known. Such reconstruction is called the study of motivation, which is considered the only task of psychology.—P. Ranschburg (Budapest).

2471. Shaw, W. C. **An apparatus for illustrating beats.** *Sch. Sci. Math.*, 1941, 41, 281-283.—The apparatus described is simple to construct, and may be used to demonstrate compression and rarefaction of sound waves, interference, re-enforcement, and beats.—G. S. Speer (Central YMCA College).

2472. Straub, J. H. **Conflicting patterns of psychology.** *Peabody J. Educ.*, 1940, 18, 169-173.—In one column 61 items are listed in terms of the atomistic pattern of psychology; and in an opposite column the same 61 items are given in organismic terms. For example, the atomistic pattern "learning by readiness-exercise-and-effect" is contrasted with "learning by maturation-goal-and-insight." "Heritage is passed down to the child" is contrasted with "The child relates the heritage to his total as he finds the needs and use for it."—N. B. Cuff (Eastern Kentucky).

2473. Yates, F. **The recovery of inter-block information in balanced incomplete block designs.** *Ann. Eugen., Camb.*, 1940, 10, 317-325.—In incomplete blocks and quasi-factorial designs there is a gain in precision due to the use of smaller blocks, but this gain is at the expense of confounding information within the blocks with that between blocks. Yates discussed the recovery of this information earlier in certain simple situations, and the present paper is an extension of these methods to the general case.—J. W. Dunlap (Rochester).

2474. Young, G. **Maximum likelihood estimation and factor analysis.** *Psychometrika*, 1941, 6, 49-53.—Fisher's method of maximum likelihood is applied to the problem of estimation in factor analysis, as initiated by Lawley, and found to lead to a generalization of the Eckart matrix approximation problem. The solution of this in a special case is applied to show how test fallibility enters into factor determination, it being noted that the method of communalities underestimates the number of factors.—(Courtesy *Psychometrika*).

[See also abstracts 2717, 2734, 2751, 2809, 2843.]

NERVOUS SYSTEM

2475. Angulo y Gonzales, A. W. The differentiation of the motor cell columns in the cervical cord of albino rat fetuses. *J. comp. Neurol.*, 1940, 73, 469-488.—The motor cell columns in the spinal cord of the rat arise by a process of segregation from a homogeneous mass in the ventral horn. Segregation begins at the medial, and progresses toward the lateral region of the cell mass. Although segregation of cells into groups is almost complete at the 17th fetal day, almost all the behavioral activity of the animal is of the total mass type until the 19th day. The cell masses first to differentiate are those which innervate the axial musculature, and they are also the first to be used in behavioral activity. The breakup of the original homogeneous mass of motor cells into individual groups does not impair the physiological unity of action of the spinal motor system; it is not, per se, the causal factor of simple reflex activities.—C. P. Stone (Stanford).

2476. Beach, F. A. Effects of lesions to corpus striatum upon spontaneous activity in the male rat. *J. Neurophysiol.*, 1941, 4, 191-195.—Although other workers have reported increased spontaneous activity after removal of portions of the frontal region of the brain and particularly by frontal lesions invading the striatum, the present author finds that 4 of 5 rats subjected to striatal lesions showed no increase in activity. One animal showed a definite increase. The author concludes that destruction of the corpus striatum has no consistent effect on the running activity of the male rat.—D. B. Lindsley (Brown).

2477. Brücke, E. T. v., Early, M., & Forbes, A. Recovery of responsiveness in motor and sensory fibers during the relative refractory period. *J. Neurophysiol.*, 1941, 4, 80-91.—Recovery of responsiveness in the sensory and motor nerve fibers of the bullfrog were approximately the same when the sensory spinal ganglion was removed, but were much slower in the sensory fibers when the ganglion was intact; 90% recovery occurred in sensory fibers in 4 msec. and in motor fibers in 0.8 msec. In cats the recovery of responsiveness was generally slower and was not apparently modified in the sensory fibers by the presence of the spinal ganglion. In both, the bullfrogs and cats, conduction velocity recovered at the same rate in sensory and motor fibers. Acetylcholine had no effect on recovery of responsiveness.—D. B. Lindsley (Brown).

2478. Crook, G. H. The effect of exercise on the recovery of motor function in the rat. *Univ. Mo. Stud.*, 1940, 15, No. 3. Pp. 68.—The left lateral funiculus in the region of the upper cervical cord was sectioned in 38 rats. This operation led to considerable impairment of motor function which under normal conditions recovered quite rapidly. Certain of the animals were subjected to varying degrees of restraint during convalescence. This produced a decrease in both rate and final level of recovery, the retardation probably being "a function of the

degree to which the restraining situation prevents active movement of the impaired part." This indicates that exercise of the impaired segments is probably a factor "essential in the recovery of parts which have been previously affected by the lesion." Any "spontaneous internal reorganization" operating during recovery seems to be negligible.—F. W. Finger (Brown).

2479. Davis, P. A. The electroencephalogram in old age. *Dis. nerv. Syst.*, 1941, 2, 77.—Abstract.

2480. Davis, P. A., Gibbs, F. A., Davis, H., Jetter, W. W., & Trowbridge, L. S. The effects of alcohol upon the electroencephalogram (brain waves). *Quart. J. Stud. Alcohol*, 1941, 1, 626-637.—EEG's were recorded for 6 men, ages 22-25, following ingestion of alcohol (2 cc. per kg. body weight). Spectrum analysis of 2 of the EEG's by means of the Grass analyzer showed a reduction in energy on the fast side of the frequency spectrum at relatively low concentrations of blood alcohol. Performances on psychometric tests, particularly addition of consecutive digits, the reversed clock problems, and strength of grip, were impaired definitely while concentration of blood alcohol was at its height (125-140 mg. per 100 cc.) and for an hour thereafter, but returned to normal in 4 or 5 hours. EEG's were also recorded for 15 chronic alcoholics in a mental hospital; these EEG's were found to lie midway between those of normal subjects and psychotic patients.—W. L. Wilkins (Milwaukee, Wis.).

2481. Jacobson, E. The direct measurement of nervous and muscular states with the integrating neurovoltmeter (action potential-integrator). *Amer. J. Psychiat.*, 1940, 97, 513-523.—The third and final step, resulting in an instrument which seems useful in office and hospital practice, toward securing a graph of the amplitudes of action potentials in a selected nerve or muscle tissue is reported. The two previous steps are reviewed. Circuit diagram and characteristic curves are presented.—R. Goldman (Boston Psychopathic Hospital).

2482. Lloyd, D. P. C. Activity in neurons of the bulbospinal correlation system. *J. Neurophysiol.*, 1941, 4, 115-134.—D. B. Lindsley (Brown).

2483. Marshall, W. H. Observations on subcortical somatic sensory mechanisms of cats under nembutal anesthesia. *J. Neurophysiol.*, 1941, 4, 25-43.—Electrograms were recorded from the tegmentum, thalamus, internal capsule, and cortex of cats in response to tactile stimuli and electrical stimulation of the radial nerve. The evoked responses in the tegmentum and internal capsule, consisted of spike barrages of 5-15 msec. in duration. Caudal to the thalamus the unresponsive period following a response is extremely brief, but rostral to the ventrolateral nucleus of the thalamus it amounts to 25-50 msec. This unresponsiveness is also found in single units. 3 types of electrical activity are recorded from the thalamus; first, a lemniscus spike barrage which is thought to discharge thalamic neurones; next occurs a burst of

diphasic spikes, thought to be associated with activation of the radiations; and finally, a long slow positive wave, thought to be a post-synaptic after-potential which in duration corresponds to the recovery time. An individual thalamic neurone can discharge at frequencies of 300-500 per second for 6-8 msec. This brief high frequency discharge appears to represent a unit or quantum of activity after which the mechanism is refractory for a certain period.—*D. B. Lindsley* (Brown).

2484. **Marshall, W. H., Woolsey, C. N., & Bard, P.** Observations on cortical somatic sensory mechanisms of cat and monkey. *J. Neurophysiol.*, 1941, 4, 1-24.—Electrograms were recorded from the surface of the cortex in anesthetized and unanesthetized cats and monkeys. Tactile stimulation of hair on the dorsal surface of the foot produced an identifiable primary response in 3 regions of the contralateral hemisphere, in areas 3, 2, and 1; occasionally responses were also found in areas 5 and 7. The evoked potential responses have focal maxima which are surrounded by a fringe of submaximal response. Adjacent peripheral regions show overlapping and interaction of cortical responses. In addition to the primary surface positive response there are 2 others of secondary nature. The primary response is not affected by different types of anesthesia nor by the spontaneous cortical activity present in the etherized and in the unanesthetized animal. The primary responses of the unanesthetized animal have a shorter recovery time, greater complexity of secondary responses, and longer lasting facilitation effects.—*D. B. Lindsley* (Brown).

2485. **McDonald, C. A., & Korb, M.** Brain abscess with brain potentials. *R. I. med. J.*, 1940, 23, 81-84.—A report of one of the earliest cases in which the EEG was used as a clinical laboratory test is presented, being supplemented by neurological and mental tests, and air ventriculograms.—*C. E. Henry* (Brown).

2486. **McDonald, C. A., & Korb, M.** Brain tumor with normal brain potentials. *R. I. med. J.*, 1940, 23, 111-113.—A case is reported wherein a brain tumor was associated with a normal EEG and normal skull plates.—*C. E. Henry* (Brown).

2487. **Murphy, J. P., & Dusser de Barenne, J. G.** Thermocoagulation of the motor cortex exclusive of its sixth layer. *J. Neurophysiol.*, 1941, 4, 147-152.—Electrocorticograms (ECG) in 2 monkeys were obtained from over the intact motor arm area of one side and over the thermocoagulated arm area of the other side, 2 months after the lesions were made. When the two inner cortical layers remain, the ECG from over that region is indistinguishable from the ECG over the normal area, but when only the sixth cortical layer remains, its ECG differs strikingly from that over the homologous normal region. There is a reduction in the frequency and amplitude of the ECG waves. The motor deficit in the form of paresis and motor impairment persists for some time but eventually clears. Stained sections of the

injured region showed that the large and giant pyramidal cells of the fifth layer were destroyed. Complete destruction of all cortical layers abolishes the ECG, indicating that the ECG originates in the cortex.—*D. B. Lindsley* (Brown).

2488. **Pennington, L. A.** The effects of cortical destruction upon responses to tones. *J. compar. Neurol.*, 1941, 74, 169-191.—42 albino rats were trained to perform a simple motor response to avoid an electric shock, at the signal of a 1000 cycle tone. These animals afford a basis for measuring the effects of small, bilateral cortical lesions upon initial acquisition, postoperative retention, and postoperative relearning. A small subordinate area within the auditory cortex was defined on the basis of postoperative performance scores, which, when invaded by bilaterally symmetrical lesions, plays a very important role in the adaptive behavior that is conditioned upon this 1000 cycle tone. Total bilateral destruction of this subordinate area results in reduced efficiency of initial learning; partial destruction, in reduced efficiency of postoperative retention. Unilateral lesions are without any effects whatever on learning or retention scores. The author suggests that destruction of this special subordinate area within the auditory cortex may give rise to phenomena which are analogous to those underlying visual scotomas; in this sense, the data support a peripheral theory of audition.—*C. P. Stone* (Stanford).

2489. **Pfaffman, C.** Potentials in the isolated medullated axon. *J. cell. & comp. Physiol.*, 1940, 16, 407-410.—Observations on frog sciatic nerve preparations that the extrinsic action potential is maximal at the node of Ranvier suggest that it arises there. The electronic spread is believed to proceed from the active locus and conduction to be mediated by the progressive activation of each succeeding node as a unit.—*O. W. Richards* (Spencer Lens Company).

2490. **Robinson, L. J.** Incidence of abnormal electroencephalograms in epileptic persons over forty years of age. *Dis. nerv. Syst.*, 1941, 2, 55-58.—An analysis of the electroencephalograms recorded from 203 epileptic patients was made with reference to the age incidence. A normal resting record was obtained from 104 patients of whom 20% were over 50 and 28% over 40 years of age. An abnormal resting record was obtained from 99 patients of whom 13% were over 50 and 16% over 40 years old. "There was a lesser incidence of electroencephalographic abnormality among epileptic patients over the age of forty and fifty years than in those under these ages. There were no differences in the type of epilepsy (whether idiopathic or symptomatic), or in the age of onset, or in the treatment between the younger and older age groups."—*C. E. Henry* (Brown).

2491. **Rubin, M. A., & Freeman, H.** Brain potential changes and skin temperature during cyclopropane anesthesia. *Curr. Res. Anaesth.*, 1941, 20, 45-49.

2492. Turner, R. S., & German, W. J. **Functional anatomy of brachium pontis.** *J. Neurophysiol.*, 1941, 4, 196-206.—The effect of section of the brachium pontis in 3 monkeys was studied with reference to: psychobiological tests (problem boxes) in which the animals had been previously trained; cerebellar functions such as gait, posture, equilibrium, and muscle tone; and personality characteristics. Retention and execution of learned problems were not affected by unilateral or bilateral section. Unilateral section produced circus movements to the side of the lesion, incoordination, awkwardness, and hypotonia of lower extremities for 3-4 weeks. Bilateral lesions of the brachium pontis produced the same symptoms as unilateral section, but awkwardness and diminution of general activity were more persistent and enduring; also there was incoordination between upper and lower extremities. The authors conclude that the corticoponto-cerebellar system is not necessary for the performance of precise manual functions or learned behavior. The system seems to be necessary for the coordination of gross movements.—D. B. Lindsley (Brown).
2493. Wang, G., & Lu, T. **Development of swimming and righting reflexes in frog (*Rana Guentheri*): effects thereon of transection of central nervous system before hatching.** *J. Neurophysiol.*, 1941, 4, 137-146.—Embryonic tadpoles were shelled from eggs, and the development of their swimming and righting behavior was observed with and without lesions of the central nervous system. The normal development of swimming undergoes stages similar to those described by Coghill for *Amblystoma*. The stages are (1) non-motile, (2) flexure, (3) S-reaction, (4) transitory movements of body, (5) control of direction of swimming, (6) maintenance of normal gravitational orientation. Spinal cord transection arrests development at stage 4; transection at mesencephalon limits development to stage 5; removal of highest brain centers has no effect on development of swimming. Transections behind hind-brain prevent normal development of righting reflexes in the 6th stage. Normal and mesencephalic larvae recover from labyrinthectomy. Spinal, decerebrate, and mesencephalic tadpoles are as active as normal ones; except for this fact, which indicates a lack at this stage of development of higher center control over lower centers, the results agree with the effects of lesions of similar character in adult amphibians and mammals.—D. B. Lindsley (Brown).
2494. Young, G. **On reinforcement and interference between stimuli.** *Bull. math. Biophys.*, 1941, 3, 5-12.—"It is shown that the current 'two-factor' theory of nerve excitation can account for sustained inhibition or enhancement by a sequence of stimulus pulses, and for the decrease in the reinforcement period with each successive pulse of the train."—N. R. Bartlett (Brown).
- [See also abstracts 2502, 2527, 2530, 2562, 2571, 2574, 2644, 2725, 2863.]
- RECEPTIVE AND PERCEPTUAL PROCESSES
2495. Adrogué, E. [Considerations on the homonymous hemianopsias.] *Arch. Otol. B. Aires.*, 1939, 14, 584 ff.—[Abstracted review; original not seen.] A complete review of the subject, including anatomical, etiological, and psychological aspects of the hemianopsias.—D. J. Shaad (Detroit, Mich.).
2496. Allen, F., & Schwartz, M. **The validity of the Ferry-Porter law in depressed and enhanced states of retinal sensitivity.** *Canad. J. Res.*, 1940, 18, No. 9, 151-160.—(*Biol. Abstr.* XV: 4191).
2497. [Anon.] **Camouflage in modern warfare.** *Nature, London.*, 1940, 145, 949-951.—W. S. Hunter (Brown).
2498. Berens, C. **Modified Perlia test for depth perception at middle distance.** *Trans. Sect. Ophthalm. Amer. med. Ass.*, 1939, 90, 469.—Abstract.
2499. Dalziel, C. F., & Lagen, J. B. **Practical aspects of electric shock.** *Elect. West.*, 1941, March. Pp. 6.—In connection with experiments on the effects of electric current on muscular control, the authors measured the smallest currents that were perceptible under normal circumstances. The threshold of mucous membrane perception (tongue) was 30 microamperes for 60-cycle alternating current, and 16 microamperes for direct current. The threshold of skin perception was 1.1 milliamperes for 60-cycle alternating current, and 5.2 milliamperes for direct current. Tests were also made to determine whether immunity to electric shock could be developed by repeated stimulation. Only slight increases in the threshold of muscular non-control were noted under these conditions.—J. S. Brown (Harvard).
2500. Davis, E. D. D. **Deafness due to gun-fire.** *Med. Pr.*, 1940, 204, 332-334.
2501. Eckardt, R. E., & Johnson, L. V. **A comparison of two methods of measuring dark adaptation.** *J. Pediat.*, 1941, 18, 195-199.—The authors compared the results obtained on the same subject with the biophotometer and the Hecht-Schlaer adaptometer. Cone adaptation was absent from the biophotometer curve as this instrument does not use a bright enough bleach light. The first reading obtained after the bleach period, however, corresponded to the final cone threshold as determined by the adaptometer. Rod adaptation, as measured by the two instruments, was the same. The conclusion is made that the use of the biophotometer in determining vitamin A deficiency is valid.—E. Green (Bradley Home).
2502. Galambos, R. **Cochlear potentials from the bat.** *Science*, 1941, 93, 215.—Using a magnetostriction oscillator, a Galton whistle, or the cry of another bat as sound sources and a supersonic microvoltmeter as the recording instrument, the author has obtained potentials from the cochleas of more than 30 bats which go up to 98,000 cycles. This limit is set by the recorder, not by the cochlea. "Appropriate checks establish the cochlea itself as the source of the potentials which appear in every

respect to be similar to cochlear potentials from other mammals."—F. A. Mote, Jr. (Connecticut)

2503. Gardner, W. A. Photographic analysis of some unexplored visual phenomena. *J. opt. Soc. Amer.*, 1941, 31, 94-98.—The visibility of spokes of rotating wheels may be reproduced photographically exactly as seen by the eye. This demonstrates that apparent spoke visibility is due to external causes and that stroboscopy is not involved. The phenomenon is explained as depending upon the mechanical creation of a cycloidal pattern progressively brought into existence by the component rotation and translation. This cycloid effect favors a theory of continuity of vision (persistence of retinal image allowing the eye to summate a variable fraction of the total pattern), analogous to the continuous sensitivity of the camera film with wide open shutter. The Roget effect is similarly explained.—R. J. Beitel, Jr. (American Optical Company).

2504. Gibson, K. S., & Nickerson, D. An analysis of the Munsell color system based on measurements made in 1919 and 1926. *J. opt. Soc. Amer.*, 1940, 30, 591-608.—R. J. Beitel, Jr. (American Optical Company).

2505. Hardy, J. D., Wolff, H. G., & Goodell, H. Studies on pain. A new method for measuring pain threshold: observations on spatial summation of pain. *J. clin. Invest.*, 1940, 19, 649-657.—(*Biol. Abstr.* XV: 8192).

2506. Hogben, L., & Landgrebe, F. The pigmentary effector system. IX. The receptor fields of the teleostean visual response. *Proc. roy. Soc.*, 1940, B128, 317-342.—(*Biol. Abstr.* XV: 8195).

2507. Holm, E., & Lodberg, C. V. A family with total colour-blindness. *Acta ophthalm., Kbh.*, 1940, 18, 224-258.

2508. Jeans, P. C., Blanchard, E. L., & Satterthwaite, F. E. Dark adaptation and vitamin A; further studies with the biophotometer. *J. Pediat.*, 1941, 18, 170-194.—"Evidence is presented that the results obtained with this instrument are consistent from test to test of the same subjects and correspond with the vitamin A status of those subjects, when the technique employed is satisfactory and when certain interpretations are applied. By mathematical analysis of the results, the technique described in 1937 has been shown to be satisfactory. Reports of inconsistent results by other observers have been reinterpreted in the light of our own experience, with the conclusion that the apparent inconsistencies have a logical explanation in variability of the status of the subject rather than in fallibility of the test."—E. Green (Bradley Home).

2509. Kintner, G. F. Aniseikonia and optometry. *Optom. Wkly.*, 1941, 32, 117-119.—A brief review of significance of unequal retinal images in the practice of optometry.—D. J. Shaad (Detroit, Mich.).

2510. Kruta, V. O pocitu bolesti. (On the perception of pain.) *Čas. Lék. čes.*, 1939, 24, 1-13.—(*Biol. Abstr.* XV: 8196).

2511. Lijó Pavía, J. [Toxic effects of alcohol on vision.] *Rev. oto-neuro-oftal.*, 1940, 15, 10 ff.—[Abstracted review; original not seen.] The prognostic gravity of early visual changes in alcoholic subjects is emphasized. When the disorder is minimal, it appears as a mist in front of everything, and the patient may speak only of shadows in the vision. Gradually central vision is affected and the patient finds it difficult to perform his usual tasks. The shadows assume the character of a positive and transitory central scotoma. The scotoma is a symptom in cases of alcoholic retrobulbar neuritis and forms the basis of visual hallucinations in delirium tremens. Alterations in vision depend not on the quantity of alcohol ingested but on the development of a vitamin B deficiency which a minimum of alcohol may exteriorize.—M. Keller (Butler Hospital).

2512. Littler, T. S. Effect of noises of warfare on the ear. *Nature, Lond.*, 1940, 146, 217-219.—The deafening effect of noises produced by explosives and by airplane motors is discussed. The steepness of the wave form is as important a factor as is the maximal pressure at the ear. For this reason protection against the high components is particularly necessary. Audiograms demonstrate that aviators suffer temporary high-tone deafness after flights of only one hour, and that after recurrent exposure a permanent impairment of hearing above 2000 cycles may be induced. Suitable protection prevents this loss; various protective devices are compared.—F. W. Finger (Brown).

2513. Ludvig, E. Extrafoveal visual acuity as measured with Snellen test-letters. *Amer. J. Ophthalm.*, 1941, 24, 303-310.—A method of measuring visual acuity in eccentric fixation is presented; data for 3 subjects are included.—D. Shaad (Detroit, Mich.).

2514. Ludvig, E. Effect of reduced contrast on visual acuity as measured with Snellen test letters. *Arch. Ophthalm., Chicago*, 1941, 25, 469-474.—Snellen letters were painted in shades of gray on white backgrounds to give 4 degrees of contrast, calculated as the difference in brightness between letters and background divided by the brightness of the background. Average intensity of illumination on the charts was 23 foot-candles. For the right eyes of 3 observers, average acuity measurements were approximately: 20/26 for 5.3% contrast, 20/19 for 6.8%, 20/12 for 34.4%, and 20/10 for 96.1%. Evidently at high levels of contrast acuity shows little variation with changes in contrast, but at low levels the contrast factor is of predominant importance. On the usual Snellen charts contrast is approximately 93%; the frequent small variations from this amount are practically unimportant. These data indicate that reduction of light difference sensitivity to 1/15 normal would not reduce acuity below 20/40, hence the reduced sensitivity occasionally demonstrated in amblyopia ex anopsia is inadequate to effect the associated loss in acuity.—M. R. Stoll (American Optical Company).

2515. Martin, H. G. Illumination standardization of the Snellen chart. *Amer. J. Ophthalm.*, 1941, 24, 287-291.—Apparatus is described to provide variable illumination for the Snellen chart, from 2 to 500 foot-candles. No standard specification for light intensity and quality has been established for routine use.—D. J. Shaad (Detroit, Mich.).

2516. Nickerson, D. History of the Munsell color system and its scientific application. *J. opt. Soc., Amer.*, 1940, 30, 575-586.—R. J. Beitel, Jr. (American Optical Company).

2517. Oberndorf, C. P. Time—its relation to reality and purpose. *Psychoanal. Rev.*, 1941, 28, 139-155.—The appreciation of reality is dependent on the degree of feeling with which one invests the body and the external environment; the perception of time depends on the intensity of registration of physiological reflexes. Time perception is distorted in the absence of a sense of reality and strongly affected by the presence or absence of goals. Clinically the best approach to disturbances of reality and time perception is through examination of the patient's purposive strivings.—G. Brighthouse (Occidental).

2518. Otuka, J. Über den Unterschied zwischen der Sehschärfe im hellen Zimmer und der im dunklen. (Difference between visual acuity in a light and a dark room.) *Acta Soc. ophthalm. jap.*, 1940, 44, 2065-2067.

2519. Peddie, W. Colour vision and chromaticity scales. *Nature, Lond.*, 1940, 146, 717-718.—Considering the difficulty in setting up a chromaticity scale uniform in all stages of color variation, the writer suggests that Helmholtz's diagrammatic representation might be applicable. In this schema sensation space, rather than stimulus space, is used, employing the form of a hemisphere to include all variations in hue, saturation, and brightness. Distance from the polar axis represents degree of saturation, longitude the hue, and latitude the intensity of sensation.—F. W. Finger (Brown).

2520. Richter, C. P., & Campbell, K. H. Taste thresholds and taste preferences of rats for five common sugars. *J. Nutrit.*, 1940, 20, 31-46.—(*Biol. Abstr.* XV: 8200).

2521. Riddell, W. J. B. A pedigree of hereditary stationary sex-linked night blindness. *Ann. Eugen., Camb.*, 1940, 10, 326-331.—An incomplete but highly indicative pedigree for studying the genetic linkage underlying night blindness is presented.—J. W. Dunlap (Rochester).

2522. Riggs, L. A., & Graham, C. H. Some aspects of light adaptation in a single photoreceptor unit. *J. cell. & comp. Physiol.*, 1940, 16, 15-23.—Adding short flashes (0.01 sec.) to a *Limulus* optic nerve preparation already adapted to a given level produces an increased frequency of nerve impulses in the single fiber. The increase is a function of the adaptation time to the continual illumination. The response increases after the first second to a maximum after about 10 seconds and then

decreases. Sensitivity increases from the first second to the 20th to 80th and then decreases as long as the eye is stimulated by light.—O. W. Richards (Spencer Lens Company).

2523. Rochon-Duvigneaud, A. *Physiologie comparée de la vision. I. Physiologie générale. L'oeil dans la série animale.* (Comparative physiology of vision. I. General physiology. The eye in the animal scale.) *Pr. méd.*, 1939, No. 61, 1199-1201.—A brief description of the development of the eye through the animal phyla is given.—C. Nony (Sorbonne).

2524. Rochon-Duvigneaud, A. *Physiologie comparée de la vision. II. Methodes générales. Les euryphotés et les stenophotes.* (Comparative physiology of vision. II. General methods. Euryphotés and stenophotes.) *Pr. méd.*, 1939, No. 70, 1319-1321.—The best method is to observe the animal in its natural environment. Adaptation depends on whether the species is active by day (lizards) or by night (night birds); the first are called stenophotes, the second euryphotés, the latter being able to see in broad daylight as well. Retinal purple and the chromatic error are dealt with. Regarding color vision, in some species (chelonians, saurians, birds) cones with a spot of fat which turns light rays into yellow, orange, or red are found. The effect on vision is not that of a color filter but rather that of a multi-colored mosaic which increases the difference between colors. The little jerky head or eye movements of birds make them see as through colored balls. Their color vision is superior to that of man; they are able to distinguish insects which to us are blended with the environment.—C. Nony (Sorbonne).

2525. Rochon-Duvigneaud, A. *Physiologie comparée de la vision. III. L'acuité visuelle dans l'air et dans l'eau.* (Comparative physiology of vision. III. Visual acuity in air and water.) *Pr. méd.*, 1939, No. 79, 1471-1473.—In the higher species of monkeys, where the eye is the same as in man, vision is presumably as good as ours. Most other mammals have no fovea and poor visual acuity; alone on these grounds a dog, e.g., could not learn how to read. Next, the visual organs of birds and crustacea are described. Vision in water of some mammals, like seals and otters, and of diving birds, is due to their great power of accommodation. Mammals living in water all the time, like whales, and fish are hyperopic; above water they would be myopic and astigmatic. The existence of blind fish and the frequently muddy condition of the water seem to indicate that fish can substitute tactile and gustatory sensations for vision. The visual apparatus in some species allows vision in air and in water, simultaneously (*Anableps tetraodon*) or alternatively (*Periophthalmus kohl* and *Toxotes jaculator*).—C. Nony (Sorbonne).

2526. Rochon-Duvigneaud, A. *Physiologie comparée de la vision. IV. Les deux régimes visuels dans la vision des vertébrés. Conclusion.* (Comparative physiology of vision. IV. The two visual

systems in the vision of vertebrates. Conclusion.) *Pr. méd.*, 1940, No. 15, 195-196.—From the point of view of relationship between the two eyes, vertebrates can be divided into (1) lower vertebrates, including birds, where the two eyes move separately and (2) mammals, where the eyes move together. In the first class the chiasm is total, while in mammals the outer half of each retina sends a direct tract to the cortical center. Thus the binocular field of vision in birds cannot be equivalent to that of mammals. Some remnant of ocular independence is found in man, where the outer edge of each visual field is, on a length of about 30°, independent of its opposite, because the nasal rim of each retina enjoys only monocular vision. It is probably linked to the opposite cortical center only by an independent part of the crossed tract. This theory has so far been advanced only by Brouwer (1936).—C. Nony (Sorbonne).

2527. Roeder, K. D. The origin of visual rhythms in the grasshopper, *Melanoplus femur-rubrum*. *J. cell. & comp. Physiol.*, 1940, 16, 399-401.—The rhythmic response characteristic of the partially dark adapted eye originates in the optic ganglion; the term protocerebral rhythm, previously used, is misleading and should be abandoned. Attempts to obtain the optic rhythm from eye-optic ganglion preparations were unsuccessful.—O. W. Richards (Spencer Lens Company).

2528. Ruckmick, C. A. Illusions in printed matter. *Science*, 1941, 93, 236.—The author has noted an illusion involving the original and carbon copy of, preferably, single spaced material with no paragraph indentations. If the dimmer original is rotated over the darker copy through an angle of 5-20°, there appear to be concentric circles radiating like ripples on the surface of water. Another illusion occurs when a group of 4's which begin a line of type appears to make the line droop. A third effect concerns lines drawn on a typewriter. These lines, when about half way across the paper, seem to be dropping away from the others above and appear not to be parallel to them.—F. A. Mote, Jr. (Connecticut).

2529. Selfridge, G. High tone deafness from a nutritional standpoint. *Ann. Otol., etc., St. Louis*, 1939, 48, 608 ff.—[Abstracted review; original not seen.] 81 patients suffering from deafness (47 nerve deafness and 34 conduction deafness) were examined for vitamin deficiency. All showed a low B₁ output. Complete histories are given of 7 cases treated with vitamins (plus other methods of treatment which seemed indicated). All cases improved. The author believes that people of advancing years may need to take either thiamin chloride or the whole B₁ complex at intervals during the balance of life, even after hearing has apparently become permanently improved.—M. Keller (Butler Hospital).

2530. Smith, K. U. Experiments on the neural basis of movement vision. *J. exp. Psychol.*, 1941, 28, 199-216.—Threshold velocities of movement vision and the frequency of optokinetic head nystag-

mus as a function of the velocity of movement of a striated visual pattern were determined in guinea pigs by means of the rotating drum method. Removal of the occipital areas of the brain, hemidecortication combined with removal of the occipital area of the other cortex, and complete bilateral decortication produce no change in the upper velocity thresholds at which movement vision seems to occur. Removal of one hemisphere results in an increase in the frequency and magnitude of the nystagmic responses when the stimulus pattern moves toward the side opposite the lesion. Under the same conditions, the nystagmus index, a measure of the number of stripes passing per response, is lower. It is concluded, in general, that movement vision in its various aspects is under multiple control of cortical and subcortical centers. The principle function of the cortical centers is to mediate movement vision for isolated patterns in the visual field, while the subcortical centers may mediate responses based on the movement of complex striated patterns. Since the guinea pig does not normally respond to the movement of isolated objects, its capacity for movement vision remains practically unchanged following removal of the cortex.—H. W. Karn (Pittsburgh).

2531. Tyler, J. C., & Hardy, A. C. An analysis of the original Munsell color system. *J. opt. Soc. Amer.*, 1940, 30, 587-590.—R. J. Beitel, Jr. (American Optical Company).

2532. Verrier, M. L. Vision et vitamines. (Vision and vitamins.) *Rev. gén. Sci.*, 1940, No. 3, 57-60.—In confirmation of Wald's experiments the author finds from her own experiments on the retinae of fish and mammals that the fovea contains vitamin A as well as the peripheral retina. The low sensibility of the fovea at low temperatures is not due to lack of vitamin A. The amount of vitamin A₂ in the retina of fish is not related to the relative number of cone or rod cells. The red, brown, or purple pigments in the retinae of cephalopods, which have about the same curves of absorption as ordinary retinal purple, are not altered by light and contain no vitamin A₁ or A₂. Still, the reaction of animals with such pigments to light is in no way different from that of animals with ordinary retinal purple. The discovery of anatomical alterations in the retinae of animals and men deficient in vitamin A and suffering from hemeralopia leads to the hypothesis that these alterations, rather than lack of vitamin A, are responsible for the hemeralopia. Deficiency in vitamin A can be detected by hemeralopia tests; tests allowing early diagnosis should be widely applied in schools.—C. Nony (Sorbonne).

2533. Weigert, F. Vision and the photochemistry of visual purple. *Nature, Lond.*, 1940, 146, 31.—The writer postulates an explanation for certain phenomena occurring in an artificial retina (frog visual purple embedded in solid gelatine). Extending the principles to the living retina, it is suggested that the products of breakdown of original visual purple excite the optic nerve terminals to produce colorless sensation in scotopic vision and white

sensation in photopic vision. Monochromatic light of wavelength- λ produces an isomeric visual purple- λ by a *cis-trans* transformation of a few double bonds; this substance stimulates colored sensations with the dominant wavelength- λ . The mixed sensation of whitish hues is stimulated by the isomerics together with the products of decomposition. The 3-component theory of color vision and color blindness is understandable in terms of this hypothesis.—*F. W. Finger* (Brown).

2534. Wolff, H. G., Hardy, J. D., & Goodell, H. Studies on pain. Measurement of the effect of morphine, codeine, and other opiates on the pain threshold and an analysis of their relation to the pain experience. *J. clin. Invest.*, 1940, 19, 659-680.—(*Biol. Abstr.* XV: 8204).

2535. Woollard, H. H., Weddell, G., & Harpman, J. A. Observations on the neurohistological basis of cutaneous pain. *J. Anat., Lond.*, 1940, 74, 413-440.—(*Biol. Abstr.* XV: 4217).

2536. Wright, W. D. Colour vision and chromaticity scales. *Nature, Lond.*, 1940, 146, 155-158.—The writer first mentions several fields of investigation in color vision that may prove most fruitful. The C. I. E. color chart is discussed from the theoretical and practical standpoints. It is suggested that this system of colorimetry be altered by the use of an oblique projection of axes, so that it could more nearly represent equivalent color differences while adhering to the C. I. E. principles of designation.—*F. W. Finger* (Brown).

[See also abstracts 2442, 2471, 2483, 2484, 2488, 2538, 2548, 2554, 2570, 2727, 2750, 2865.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

2537. Bellak, L. A possible dynamic explanation of variability in the IQ. *J. abnorm. soc. Psychol.*, 1941, 36, 106-109.—Not only is the high variability in IQ at the onset of pubescence explained by the psychoanalytic theory of the relationship between libidinal and mental processes, but also the low variability at 6 is apparently explained satisfactorily as the result of the uniform phylogenetic onset of the latency period and of the uniform changes at that time which are marked enough to rule out individual differences.—*C. H. Johnson* (Portland, Ore.).

2538. DeMand, J. W. The effects of olfactory cues on the maze learning of white rats. *Trans. Kans. Acad. Sci.*, 1940, 43, 337-338.—86 male white rats ran 34 trials on a 12-alley multiple-T maze. They were divided into 3 groups: (1) those for whom an animal odor trail marked the true path, (2) those for whom an odor trail marked the blind alleys, and (3) those for whom all odor trails were eliminated. Reliable differences were shown in error scores between groups 1 and 2. "The validity of measurements of learning may be greatly

influenced by definite animal odor trails."—*W. A. Varvel* (Chicago).

2539. Dulsky, S. G. A functional concept of intelligence. *J. educ. Psychol.*, 1940, 31, 641-652.—The functional concept of intelligence views intelligence as a variable performance which depends on the changing relation of the organism to its environment. From this viewpoint we should expect large test-retest differences in IQ.—*R. M. Bellows* (Maryland).

2540. Forster, M. Visual and visual-kinaesthetic learning in reading nonsense syllables. *Univ. Wash. Coll. Educ. Rec.*, 1940, 7, 24-29.—(*Educ. Abstr.* VI: 350).

2541. Gilbert, J. G. Memory loss in senescence. *J. abnorm. soc. Psychol.*, 1941, 36, 73-86.—The original intellectual level was controlled by matching the 174 senescents for vocabulary level with 174 individuals in the twenties. Results show completely reliable differences between the two groups, giving evidence of an actual decrease in memory at senescence. Older persons show relatively little decline in ability to receive new impressions but suffer greatly in their ability to form the new associations necessary to the learning of entirely new material. Their learning process seems to suffer from their decreased flexibility and adaptability. It is suggested that older persons who wish to compensate for their normal memory decline may practice remembering things.—*C. H. Johnson* (Portland, Ore.).

2542. Hsiao, H. H. [An experimental comparison of the whole and the part method of learning.] *Stud. Educ. Psychol., Nat. cent. Univ.*, 1940, 1, No. 2, 63-70.—The material consisted of 4 prose passages of equal difficulty, each containing 400 Chinese characters written on cards; 2 passages were presented in sections, while the other 2 were not. 16 university juniors and seniors, divided into 4 groups of 4, served as subjects. Each of the 4 passages was presented to each group, alternating the whole and the part passages. The subjects were required to read out each character as presented and to reproduce them (after the entire passage had been presented), both immediately after the 4th presentation and after an interval of 1 week. The material was presented serially, each character at a time for $\frac{1}{2}$ sec., the speed of reading (learning) being controlled. The results show marked individual differences: some were more efficient with the whole method; others, with the part method. For both, immediate memory and 1-week retention, the variability was larger with the part than with the whole method. Superiority of the whole method became more manifest as time went on, the difference immediately after the experiment being 7.75 points; after 1 week, 33.68 points.—*C. F. Wu* (Chengtu).

2543. Jongbloed, J. Einfluss bedingter Reize auf den Gaswechsel beim Menschen. (Influence of conditioned stimuli on the gaseous metabolism in man.) *Acta brev. neerl. Physiol.*, 1940, 10, 96-99.—4 subjects performed physical exercises (uncondi-

tioned stimulus) in time to the beating of a metronome (conditioned stimulus). After 21 applications of combined conditioned and unconditioned stimuli, there was no trace of an increase in CO_2 production upon application of the conditioned stimulus alone. This contrasts with a previous investigation which found marked increases in CO_2 production and concluded that metabolism was under the influence of the cerebral cortex.—D. Prager (U. S. Employment Service).

2544. Kelly, G. A. Introduction: a search for dynamic and accessible factors in intellectual development. *Fort Hays Kan. St. Coll. Stud.*, 1940, No. 2, 5-10.—No matter what theory one holds as to the intrinsic nature of intelligence, intellectual development can be viewed as the resultant of a number of vectors which vary in strength, in duration, from time to time, and from person to person. It should be possible to speed up intellectual development in 3 ways: "(1) Increase all of the vectors which have projections upon the line of intellectual development. (2) Modify the system so that the resultant becomes a maximum for a given vectoral total, or (3) increase a selected vector which does not have too great an angular separation from the line of intellectual development." The application of the third method requires a clinical study of each case. Examples of all 3 types of approach are given. Interesting leads and preliminary results with groups of varying ages and types have been secured.—W. E. Galt (Lifwynn Foundation).

2545. Landahl, H. B. Studies in the mathematical biophysics of discrimination and conditioning: I. *Bull. math. Biophys.*, 1941, 3, 13-26.—"A mechanism with properties of discrimination and conditioning is discussed mathematically with reference to special cases in the problem of error elimination, elimination of the longer of two paths to a goal, elimination of a blind as well as a return alley, and Lashley's jumping problem. For each case equations are derived which are qualitatively correct as far as was determined. Several qualitative deductions are made, and these are substantiated by data available. In principle, the theory makes it possible to predict, for any trial, the number of errors at any junction of a maze provided certain experimental conditions are satisfied, and if a sufficient number of experimental values are given to determine the parameters of the system."—N. R. Bartlett (Brown).

2546. Mátrai, L. Modern gondolkodás. (Modern thinking.) Budapest: Bibliothek of the Magyar Szemle Society, 1940. Pp. 80.—In the introduction the terms modern and thinking are defined. The body of the book deals, in 4 chapters, with: body types; mind, life, and death; culture and destiny; modern logic; and diffusion of thought. Thought processes of the scientist, the artist, the politician, and the masses are discussed in relation to emotion and goals. Also, problems of leadership and sex differences are treated.—P. Ranschburg (Budapest).

2547. Nutt, R. H. How to develop a good memory for names, faces, and facts. New York: Simon & Schuster, 1941. Pp. 248. \$1.96.—Based on the thesis that "remembering is a process that must be learned, just like walking, talking, eating," etc., the author presents a memory system which he calls the "mental filing system."—L. M. McCabe (Cambridge, Mass.).

2548. Sanders, F. K. Second-order olfactory and visual learning in the optic tectum of the goldfish. *J. exp. Biol.*, 1940, 17, 416-433.—In experiments which are described, specimens of the goldfish (*Carassius auratus*) learned to swim to concealed food when an illuminated disk was presented. Presentation of an olfactory stimulus, during reinforcement of this visual learning, resulted in the addition of the olfactory stimulus to the stimulus complex necessary to call forth the learned reaction. 5 individuals also learned to respond to a situation wherein, after preliminary training with an optic stimulus using food as a reward, amyl acetate was given as olfactory stimulus and the optic stimulus used as reward. The author terms this effect second-order learning and considers it comparable to the second-order conditioned reflexes of Pavlov. In 4 animals so trained, surgical removal of areas in the optic tectum, or cuts made at its anterior border, caused disturbances in the second-order learning. The inference is drawn that the connection between the telencephalic primary olfactory center and the tectum involved in this learning passes into the tectum at its anterior border, since cuts made in this region interfere with learning, even though a great part of the tectum remains intact.—C. K. Trueblood (Cambridge, Mass.).

2549. Seashore, H., & Bavelas, A. The functioning of knowledge of results in Thorndike's line-drawing experiment. *Psychol. Rev.*, 1941, 48, 155-164.—Thorndike argued, on the basis of the results of 3000 attempts to draw a 4 inch line with eyes closed, that repetition alone does not change performance. A re-examination of his data shows that the variability of the successive attempts actually decreased and stabilized around 5 inches as a standard, which is taken to be the subject's actual blindfold concept of a 4 inch line. This could have been predicted from the recognition that knowledge of results facilitates learning, and that the subject must have had some, though imperfect, knowledge of results.—A. G. Bills (Cincinnati).

2550. Siipola, E. M. The relation of transfer to similarity in habit-structure. *J. exp. Psychol.*, 1941, 28, 233-261.—"A habit-system is conceived of in terms of a hierarchy of superordinate and subordinate segments of directed activity. . . . The terms 'superordinate' and 'subordinate' are used to refer merely to degrees of inclusiveness." The similarity at the superordinate rather than at the subordinate level of 2 successive tasks was varied, and the effects both in terms of gross transfer-effects and specific reversion (transfer) phenomena

were measured. "In Experiment I the gross transfer-effects, reflecting the combined effect of reversion phenomena at both the superordinate and subordinate level, are studied. In Experiment II, superordinate phenomena (serial-order reversions) are isolated for study, and in Experiment III subordinate phenomena (code reversions) are isolated for study. Experiments II and III thus represent an analysis of the reversion phenomena responsible for the gross transfer-effects in Experiment I." "Perhaps the most significant suggestion of the present research is that of the necessity for defining activities . . . in terms of precise variables." "The need for appropriate concepts . . . is particularly urgent at this time in view of the present trend toward integration of simple phenomena such as code-reversions with the most complex phenomena such as regression at the final, superordinate level of personality structures."—*H. W. Karn* (Pittsburgh).

[See also abstracts 2448, 2492, 2558, 2569, 2621, 2637, 2642, 2645, 2680, 2700, 2768, 2817, 2822, 2824, 2826, 2847, 2857, 2858.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

2551. **Berg, R. L., & Beebe-Center, J. G.** Cardiac startle in man. *J. exp. Psychol.*, 1941, 28, 262-279.—"This paper deals with changes in heart-rate induced in man by pistol shots." The increment in heart-rate is specified in terms of the index of cardiac startle, i.e., the difference between the peak rate in the 5 seconds following the stimulus and the average rate for the 12 seconds preceding the stimulus. "The startle response becomes habituated by successive shots, but the response may be disinhibited by the interpolation of either a different stimulus or a lapse of time. There is some indication that the increment in heart-rate is positively correlated with subjective report of startle and with skeletal movement. The repeat-reliability of the index of cardiac startle on thirty-three subjects was $.53 \pm .08$. . . The neural mechanism responsible for the increment in heart-rate is the release of vagal inhibition of the heart and not an increase in sympathetic activity."—*H. W. Karn* (Pittsburgh).

2552. **Dalziel, C. F., & Lagen, J. B.** Effects of electric current on man. *Elect. Engng.*, 1941, Feb., 1-4.—Experiments were conducted to determine the maximum 60-cycle alternating current and direct current which the average man could withstand with reasonable safety. The highest current, at which voluntary control of the muscles most directly affected was still possible, was termed the let-go current. Let-go currents for 114 men tested on 60-cycle alternating current ranged from 9.7 to 21.6 milliamperes, with 15.5 milliamperes the average. From a statistical study of the results, the authors conclude that a reasonably safe 60-cycle alternating current for a man is 8-9 milliamperes. With steady direct currents, release values of 61-83 milliamperes were obtained. Since direct currents

do not produce severe muscular contractions, these values represent the limit of endurance rather than the let-go value. The maximum safe direct current for man is estimated conservatively to be at least 80 milliamperes.—*J. S. Brown* (Harvard).

2553. **Dalziel, C. F., & Lagen, J. B.** Muscular paralysis caused by electric currents. *Electronics*, 1941, 14, No. 3, 22-23.—Tests were made to determine the threshold of muscular non-control, or the let-go current, of a group of normal men on direct current and on alternating currents from 5 to 10,000 cps. Thresholds for direct current and for high frequency alternating currents were found to be 4 or 5 times as high as that for 60 cycle current. The effect of wave form was also investigated. It was found that muscular response was proportional to the peak value of the current and not to the effective value. In general, the let-go current was independent of the electrode size, moisture on the hands, and the current pathway through the body.—*J. S. Brown* (Harvard).

2554. **Dobson, M.** Convergence. *Brit. J. Ophthalmol.*, 1941, 25, 66-71.—A preliminary discussion of the characteristics of tonic, accommodational, and fusional convergence precedes the discussion of the diagnosis and treatment of convergent imbalances. The cover test, prism stereoscope test, and duction tests are described together with the refractive and orthoptic measures used in treatment of non-pathological convergent disturbances.—*R. J. Beitel, Jr.* (American Optical Company).

2555. **D. W.** Bekämpfung der Ermüdung auf physiologischem Wege. (Control of fatigue by physiological means.) *Umschau*, 1940, 44, 413.—Vitamin C and the B complex (B_1 , B_2 , and nicotinic acid) are essential for physiological efficiency especially during the stress of war. A phosphate compound containing grape sugar and a vitamin supplement has been shown experimentally to allay fatigue and increase efficiency considerably during strenuous activity.—*D. Prager* (U. S. Employment Service).

2556. **Fenichel, O.** The ego and the affects. *Psychoanal. Rev.*, 1941, 28, 49-60.—Affect is defined as the discharge phenomenon resulting from sensation. Emotional spells occur whenever the ego has insufficient control to withstand the flux of excitement, or to overcome tension created by previous blocking. The ego's defenses against affects include diversion of the response to appear at a different time, or toward a different object, or with a different quality than a first emotional response would have been, and projection into another person.—*G. Brighouse* (Occidental).

2557. **Foxe, A. N.** The therapeutic effect of crying. *Med. Rec.*, N. Y., 1941, 153, 167-168.—"The significance of crying is so momentous that one wonders how it is that some form of tear gas has not yet achieved any vogue."—*M. H. Erickson* (Eloise Hospital).

2558. **Gardner, I. C., & Rife, D. C.** The diagnosis of five sets of triplets. *J. Hered.*, 1941, 32, 26-32.—

One monozygotic, two fraternal, and two trizygotic combinations make up the 5 sets of triplets studied as to dermatoglyphics, blood groups, eye-color and sex, plus photographs and IQ data for 4 of the sets. Conforming to expectations, the monozygotic set as yet only at pre-school age, are the most alike; incidentally, although living in a very isolated rural community with but few advantages, they are all above average. The two trizygotic sets, one not yet in school, are the most unlike. In one of the two dizygotic sets, the fraternal member leads, while in the other, the identical twins set the pace. A spirit of mutual helpfulness seems to characterize members of a set.—G. C. Schwesinger (American Museum of Natural History).

2559. Geldreich, E. W. Skin conductance changes occurring during mental fatigue and anoxemia. *Trans. Kans. Acad. Sci.*, 1940, 43, 343-344.—8 subjects worked on Bills' psychergometer while breathing air of reduced oxygen content. Bills' report of the effect of anoxemia on mental performance was verified. The author's hypothesis that an anoxic condition would make for a reduction in skin conductance was contradicted.—W. A. Varvel (Chicago).

2560. Gobey, J. T. A study of the similarity of work decrement curves. *J. exp. Psychol.*, 1941, 28, 217-232.—From each of 100 female subjects 4 ergograms were taken, namely, on the right arm, on the left arm, on the right middle finger, and on the left middle finger. The records from these 4 members of the body are alike in respect to the following tendencies: (1) to give a characteristic amount of work, (2) to distribute the work in a characteristic pattern, and (3) to work according to a characteristically irregular tempo. The second and third of these tendencies are independent of the first.—H. W. Karn (Pittsburgh).

2561. Gresson, R. A. R. The effect of increased daily illumination and of reversed day and night on the oestrus cycle of the mouse (*Mus musculus*). *Proc. roy. Soc. Edinb.*, 1940, 60, 333-343.—(*Biol. Abstr.* XV: 3793).

2562. Kellett, C. E. The diet of a group of Durham miners free from nystagmus. *J. Hyg., Camb.*, 1940, 40, 439-446.—(*Biol. Abstr.* XV: 7868).

2563. Kubie, L. S. The ontogeny of anxiety. *Psychoanal. Rev.*, 1941, 28, 78-85.—Ontogenetically, anxiety is an intermediate stage between the startle pattern and the dawn of all thought processes. The fetus is protected from both frustration and startle, but at the moment of birth these immunities are lost, and in the initial extra-uterine phases all experience is startling. Anxiety and thinking both arise from this same disposition, to become differentiated only with the passage of time.—G. Brighthouse (Occidental).

2564. Loeser, J. A. Animal behaviour: impulse, intelligence, instinct. London: Macmillan, Ltd., 1940. Pp. x + 178. 10s. 6d.—[Abstracted review; original not seen.] It is postulated that each so-called instinct is composed of numerous small

voluntary actions. "These 'small actions,' combined with a specific physical constitution, which becomes effective in the animal's natural surroundings, unite to produce one biologically purposive action." There is no rigid and automatic connection between impulse and reaction; in a particular situation the animal does the best it can, according to the pleasure principle.—F. W. Finger (Brown).

2565. Malamud, W. Current trends and needs in research on problems of the aged. *Dis. nerv. Syst.*, 1941, 2, 37-43.—This is a general survey of the problems created by the fact that there is developing a disproportionate increase in the number of aged individuals, both for the general and hospital populations. Some of the factors bearing on the development of a logical research plan are discussed, with particular emphasis on certain bodily systems and their changes with age. The author finally examines some of the psychological and sociological problems resulting from old age, and points out that changes within the whole structure may be as important as changes within any one personality.—C. E. Henry (Brown).

2566. McCann, W. H. Nostalgia: a review of the literature. *Psychol. Bull.*, 1941, 38, 165-182.—The literature on nostalgia is summarized under the headings: (1) symptoms, (2) susceptibility (as related to race and nationality, age, temperament, intelligence, education, rural and urban backgrounds), (3) conditions precipitating nostalgia, (4) theories (physiological, anatomical, and psychological), and (5) prevention and treatment.—A. W. Melton (Missouri).

2567. Ruesch, J., Finesinger, J. E., & Schwab, R. S. The electromyogram of handwriting. *Psychosom. Med.*, 1940, 2, 411-437.—Electromyographic tracings obtained from 15 subjects while engaged in handwriting are presented along with others recorded while subjects wrote with their feet. A method of statistical presentation of the results is evolved. The most adequate characteristic of an electromyographic tracing is conveyed by the ratio of the sum of the maxima to the sum of the minima in terms of height of the spikes. The study of such tracings promises to "throw light on the more general problem of tension and relaxation in their broader aspects."—P. S. de Q. Cabot (Simmons).

2568. Scantlebury, R. E. The effect of psychic phenomena on the movements of the empty stomach of man. *Grad. Stud. Monogr. Sci., Wayne Univ.*, 1940, No. 1. Pp. 32.—Recordings of stomach contractions of 2 subjects were made after 18 hour fasts, by means of a stomach ballon and manometer system. The hunger contractions were not inhibited by suggestion or by sight of food during the waking state. With the subjects in light hypnotic sleep, however, the suggestion of eating inhibited the hunger movements. It is thought that inhibition may be the result of a reflex mechanism initiated by the increased acidity of the gastric content brought about by the psychic secretion of gastric juice.—F. W. Finger (Brown).

2569. Sears, R. R., & Hovland, C. I. Experiments on motor conflict. II. Determination of mode of resolution by comparative strengths of conflicting responses. *J. exp. Psychol.*, 1941, 28, 280-286.—"In two experiments with . . . avoidance-avoidance motor conflicts, the relative strengths of conflicting responses have been systematically varied. In one, the variation was produced by combining shock punishments with instructions, and in the other, by varying the amount of practice of the responses. Both sets of results indicate clearly that the probability of blockage as a reaction to conflict increases with the approach of the strengths of the conflicting responses to equality." (See XIII: 1378).—H. W. Karn (Pittsburgh).

2570. Snyder, L. H., Baxter, R. C., & Knisely, A. W. Studies in human inheritance. XIX. The linkage relations of the blood groups, the blood types, and taste deficiency to P. T. C. *J. Hered.*, 1941, 32, 22-25.—Data were obtained from 64 sibships comprising 173 individuals and yielding 190 sib pairs. The blood groups are considered as depending on a series of 3 alleles, the blood types upon a pair of alleles without dominance, and the taste deficiency to phenyl-thio-carbamide upon a pair of alleles with dominance. The complete tabular list of sib pairs is included, arranged in a series of two-by-two tables, according to the characters studied. A second table summarizes the chi-square and probability values of the two-by-two tables. The only chi-square value which approaches significance is the relationship of the agglutinogens M and B. It is concluded that the genes for blood group, blood type, and P. T. C. reaction are independently transmitted.—G. C. Schwesinger (American Museum of Natural History).

2571. Sperry, R. W. The functional results of muscle transposition in the hind limb of the rat. *J. comp. Neurol.*, 1940, 73, 379-404.—In 9 rats the flexor and extensor muscles of the hind foot were transposed by an operation when they were from 50 days to 1 year old. A reversal of the foot movement resulted. In all cases the reversal persisted. Even total immobilization and amputation of the contralateral hind leg, similar transposition of muscles in the contralateral hind leg, amputation of both fore legs, training the rats to stretch upright on the hind legs for food, and training to climb a ladder 45 cm. high for food failed to induce any degree of re-education. These facts, coupled with evidence based on persistence of the reversed movements after deafferentation of the operated limb, indicate that there is a central nervous organization of the basic motor patterns for limb coordination.—C. P. Stone (Stanford).

2572. Stieglitz, E. J. Investigations in gerontology. *Dis. nerv. Syst.*, 1941, 2, 74-75.—"The National Institute of Health of the United States Public Service is organizing a new unit for research into some of the many problems of aging." The first undertaking of this unit is a survey of present trends of active and contemplated investigations into this problem in American scientific institutions.

It is their hope that this survey "may serve to effectively aid the promotion of closer cooperation of the scientists interested in these fields." (See also XV: 1669).—C. E. Henry (Brown).

2573. Stoner, C. R. *Courtship and display among birds*. London: Country Life Ltd., 1940. Pp. xv + 140 + 57 plates. 8s. 6d.

2574. Weinstein, E. A., & Bender, M. B. Pupillodilator reactions to sciatic and diencephalic stimulation. *J. Neurophysiol.*, 1941, 4, 44-50.—Reflex pupillodilation by sciatic nerve stimulation was abolished in the monkey, but not in the cat, by section of the cervical sympathetic trunk. In the cat section of the third cranial nerve abolished the reflex, but did not in the monkey. Similarly dilatation of the pupil produced by stimulation of the thalamus and dorsal thalamus in the cat was not abolished by section of the cervical sympathetic but was abolished by section of the third cranial nerve. Stimulation of the hypothalamus in the monkey caused bilateral pupillary dilatation, which was abolished or diminished by section of the cervical sympathetic, but not by the third nerve. In both species (cat and monkey) dilatation is accomplished by parasympathetic inhibitory and sympathetic excitatory systems, but in the cat inhibition of the parasympathetic system is predominant, whereas in the monkey excitation of the sympathetic system is predominant.—D. B. Lindsley (Brown).

2575. Young, P. T. The experimental analysis of appetite. *Psychol. Bull.*, 1941, 38, 129-164.—This paper is a critical review of contemporary research on appetite. The review considers the following major problems: (1) appetite in relation to bodily need as revealed by the self-selection method of feeding; (2) the relative dominance of appetites as revealed by the food-preference technique; (3) measurement of the demand for a single food; and (4) an analysis of appetite (in terms of its bodily and psychological components). The writer rejects the notion of a general hunger with a functional superstructure of appetites, and defends the following statement: "General hunger motivation can be factored into a group of *partial hungers*, each varying with its own deprivation period, each varying with the chemical state of the tissues, each determined to some extent by the dietary history of the animal and varying with its own degree of approach to satiation." The bodily basis of the appetites, so defined, is said to be the sensitization of the gustatory cells to special substances by deprivation. 75 references.—A. W. Melton (Missouri).

[See also abstracts 2451, 2476, 2478, 2479, 2480, 2491, 2493, 2511, 2521, 2529, 2532, 2543, 2587, 2609, 2615, 2623, 2626, 2631, 2635, 2641, 2673, 2697, 2725, 2743, 2753, 2849, 2863, 2870.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

2576. Alexander, F. "The voice of the intellect is soft." *Psychoanal. Rev.*, 1941, 28, 12-29.—As

insight triumphs over emotional patterns during psychoanalysis, sequestration occurs. Sequestration is defined as isolation and subsequent elimination of conflict. Psychoanalysis is necessarily a lengthy process because "the voice of the intellect is soft," but the fact that progress does occur indicates the persistence of the intellect. "In most cases, the greatest part of the curative process takes place after the treatment."—G. Brighouse (Occidental).

2577. Bastide, R. *Psicanalise do cafune*. (The psychoanalysis of *cafune*.) *Rev. Arch. mun., S. Paulo*, 1940, 6, 117-130.—*Cafune* means clicking the fingernails on the head and is a social institution in Brazil. The religious sociology of Freud is refuted, and an attempt is made to reconcile *cafune* with psychoanalysis and sociology. 37 references are discussed.—N. Downs (U. S. Employment Service).

2578. Coriat, I. H. The unconscious motives of interest in chess. *Psychoanal. Rev.*, 1941, 28, 30-36.—Playing chess resolves unconscious family conflicts, with the king and queen representing the father and mother. Aggression against the father and fear of losing the mother are manifested in the use of the queen to checkmate the opponent's king. The game is preëminently anal-sadistic in nature, the usual object being to render the king (father) impotent by checkmating (castrating) him.—G. Brighouse (Occidental).

2579. Dooley, L. The relation of humor to masochism. *Psychoanal. Rev.*, 1941, 28, 37-46.—Humor is an interaction of the ego and superego, with the former accepting the masochistic role. Painful experiences of the ego are made absurd by the superego, resulting in a tripartition of the personality, into sadistic superego, suffering ego, and liberated ego. When the ego is completely liberated and invulnerable, humor is absent. Humor thus becomes "one of the ways in which the ego, having conceded defeat, makes restitution to itself. It 'wangles' restoration of the parents' love by claiming the love of the parents' successor—the superego, in playful fantasy."—G. Brighouse (Occidental).

2580. Foxe, A. N. Psychoanalysis of a sodomist. *Amer. J. Orthopsychiat.*, 1941, 11, 133-143.—This is a report of an extensive analysis of a man in prison. The analysis consisted of 515 hours over a period of 2½ years. The patient's life is presented chronologically from his first remembrance at the age of 3 until his analysis at the age of 37.—R. E. Perl (Jewish Board of Guardians).

2581. Freud, S. *El diagnóstico de los hechos y el psicoanálisis*. I. (The diagnosis of behavior and psychoanalysis. I.) *Psicotecnia*, 1940, 1, 182-192.—This is the first part of a lecture given in a seminar at Vienna. It is a discussion of the analysis of behavior by the cathartic method, introduced by the explanation of free association technique as the underlying principle.—J. E. Bader (Brandon State School).

2582. Jastrow, J. Freud—his dream and sex theories; a reprint of *The house that Freud built*. Cleveland: World Publishing Co., 1941. Pp. 297. \$0.49.—See VI: 3570.

2583. Kaufman, M. R. A clinical note on social anxiety. *Psychoanal. Rev.*, 1941, 28, 72-77.—Castration fear may be projected from fear of the father to fear of an animal, and further projected to become identified with the superego. Social anxiety may result when fear is projected to other individuals in the environment who have become identified with the hostile father.—G. Brighouse (Occidental).

2584. Liebman, M. Traumatic amnesia during hypnosis. *J. abnorm. soc. Psychol.*, 1941, 36, 103-105.—The author believes this is the first reported case of an amnesia developing during hypnosis as the result of a head blow during the trance. That it was a functional amnesia was shown by the fact that memory was quickly re-established. The ordinary conception of amnesias is that they result from the relegation of ideas from the conscious to the unconscious. Since this amnesia occurred during the hypnotic (unconscious) state, there would seem to be an ultra-unconscious state existent.—C. H. Johnson (Portland, Ore.).

2585. Menninger, K. A. Some observations on the psychological factors in urination and genito-urinary afflictions. *Psychoanal. Rev.*, 1941, 28, 117-129.—Urinary overactivity may be a source of sexual satisfaction more acceptable to the conscious than is masturbation. Attacks of hysterical renal colic in individuals of the urethral personality type are suggested as worthy of special investigation.—G. Brighouse (Occidental).

2586. Murray, J. M. Symptom intensification following memory recovery; a clinical discussion. *Psychoanal. Rev.*, 1941, 28, 130-138.—Patients sometimes refuse to accept recovered memories due to an unconscious feeling of guilt; only when these guilt feelings are brought to light will a positive therapeutic response be achieved.—G. Brighouse (Occidental).

2587. Pattie, F. A., Jr. The production of blisters by hypnotic suggestion: a review. *J. abnorm. soc. Psychol.*, 1941, 36, 62-72.—Of the 11 subjects mentioned, 3 were normal, 2 were normal but had suffered from hysterical aphonia and neurotic skin gangrene respectively, and 6 were hysterical. The time required for the development of skin reactions varied enormously, from 10 minutes to 24 hours for blister, and from a few seconds to 7 hours for erythema. In the last 55 years there have been only 10 articles dealing with the formation of blisters. The physiological processes by which suggestion could produce localized and circumscribed erythemas or blisters are still not determined. Several suggestions are made for controlled experiments on a greater number of subjects with a spot of light as the stimulus.—C. H. Johnson (Portland, Ore.).

2588. Price, H. H. Some philosophical questions about telepathy and clairvoyance. *Philosophy, Lond.*, 1940, 15, 363-385.—To the writer, the reality of telepathic and clairvoyant phenomena has been demonstrated beyond question. He points out that the problem now is to fit these facts into a framework consistent with the rest of knowledge. Telepathic cognition (it should not be called "knowledge," for the percipient is not aware of the truth of the received impression) may perhaps be understood tentatively in terms of a collective unconscious common to all human minds; the causal relations between incidents occurring in 2 minds would then be of the same order as the relationship between items in one mind. Speculative explanation of clairvoyance might posit an omniscient consciousness which is aware of everything in the material world and with which we have a telepathic relation. The writer believes it more pertinent to ask why these phenomena are not more frequent than to inquire as to why they occur at all. Sense experience "is not necessarily connected with an organism or nervous system."—F. W. Finger (Brown).

2589. Schwartz, L. A. An analyzed case of essential hypertension. *Psychosom. Med.*, 1940, 2, 468-486.—This is a report of an analysis of a patient suffering from hypertension, seminal pollutions, ejaculatio praecox, anxiety, and a cardiac neurosis. The evidence suggests that "this patient's hypertension may be connected with long continued repressed hostility and rage with the consequent production of constant conflict which the individual can neither escape nor solve." Treatment in such a case involves an evaluation of the historical development of the patient's personality and emotional life.—P. S. de Q. Cabot (Simmons).

2590. Wood, A. B. Another psychologist analyzed. *J. abnorm. soc. Psychol.*, 1941, 36, 87-90.—The author undertook his analysis because he felt he needed it. Several unhappy personal experiences had left him with a deep feeling of incapacity and inferiority in the sphere of intimate emotional relationships. He was better satisfied with his post-analytic personality than he ever was with his pre-analytic one. From a professional viewpoint, he feels that the analysis has brought him a better understanding of human motivation and behavior than all of his formal study and years of teaching.—C. H. Johnson (Portland, Ore.).

[See also abstracts 2464, 2537, 2556, 2624, 2658, 2828, 2846.]

FUNCTIONAL DISORDERS

2591. Anderson, C. M. Emotional hygiene; the art of understanding. (Rev. ed.) Philadelphia: Lippincott, 1940. Pp. 242. \$2.00.—See XII: 261.

2592. [Anon.] Psychiatric mobilization in the U. S. A. *Amer. J. Psychiat.*, 1940, 97, Supplement, 4 pp.—R. Goldman (Boston Psychopathic Hospital).

2593. Baird, H. Psychoses in officers in the 1914-1918 war. *J. ment. Sci.*, 1941, 87, 109-114.—

It is the author's belief that fewer than 700 officers were certifiably insane during the last war. Reviewed in this paper are 300 consecutive cases of which 36% had insane or epileptic heredity and 23% neurotic or alcoholic heredity. Of 212 cases personally treated by the author 38% were exhaustion cases, 11.8% dementia praecox, 6.6% general paralysis, 6.1% paranoia, and 5.7% alcoholic insanity. There was a single case of epilepsy. Refusal of food was found in 50 cases. Treatment is discussed.—W. L. Wilkins (Milwaukee, Wis.).

2594. Beaglehole, E. Culture and psychosis in New Zealand. *J. Polynes. Soc.*, 1939, 48, 144-155.—A study of the crude incidence of psychosis among Europeans and Maoris from the years of 1925 to 1935, discloses for the Maoris a higher incidence of psychoses among the males than among the females, and a lower incidence of psychoses for Maoris than for Europeans of either sex. When correction is made for age distribution, this difference is slightly decreased. Based on a total of 230 cases, 131 males and 99 females, the incidence of manic-depressive psychosis was 52.6% for female Maoris and 27.9% for males, while the incidence of schizophrenia was 12.4% for females and 18.4% for males. The author discusses the difficulties of applying western psychiatric concepts to primitive peoples, and expresses the belief that the Maoris of today are more European than aboriginal Maori in their culture, and, hence, that a study of the incidence of psychosis among them should presumably be of value in tracing the processes of culture change that are now taking place in the basic patterns of Maori life.—M. H. Erickson (Eloise Hospital).

2595. Benjagar, E. A mental deficiency institution in war time. *Ment. Hlth, Lond.*, 1940, 1, 107-112.—In the current crisis, many inmates of a mental deficiency institution have been released to private industry. Others are digging trenches and making sand bags, blackout curtains, shoes, and furniture. Defectives have been successfully taught how to handle themselves in emergency situations. Firmness is stressed as a method of handling the more excitable cases.—D. Müller (U. S. Employment Service).

2596. Berger, W., & Hansen, K. [Eds.] *Allergie*. (Allergy.) Leipzig: Thieme, 1940. Pp. 728.—[Abstracted review; original not seen.] This textbook in the form of lectures by German, Austrian, Danish, and Swiss specialists gives a view of the present clinical and experimental status of the subject. The psychogenic-reflex mechanism of allergic reactions by way of the vegetative nervous system is discussed, also the personality of allergic persons. Although a comprehensive characterology is lacking, they impress one as neuropathic (not hypochondriacal or hysterical), soft, intuitive, pedantic, and undisciplined. Asthma and migraine may possibly be depressive equivalents. The first asthmatic attacks are always antigen-antibody reactions, but later attacks may be of psychogenic origin (conditioned reflex). Development of the

asthmatic predisposition is favored by depressive and other difficult psychic factors. Psychogenic influences may either facilitate or retard the organic reaction (increased cellular permeability and nervous irritability) in precipitating any allergic crisis. The place of psychotherapy is in the after-treatment, when desensitization has been carried out.—*M. E. Morse* (Baltimore, Md.).

2597. **Borel, A.** *Les réactions mentales morbides dans les psychoses chroniques.* (Morbid psychological reactions in chronic psychoses.) In *Various, Mélanges Pierre Janet*. Paris: Editions d'Artrey, 1939. Pp. 11-20.—Psychoses are the outcome of a long development, the first stages of which often seem unimportant. Spreading of the disease does not take place without some fight on the part of the patient. The fiction worked out by the patient is a reaction against the disease, a sort of halfway solution between his older self and the new way of feeling and looking at things, which is being forced upon him. On the whole, the different pathological signs are, when seen from the patient's point of view, but a hopeless attempt at an adjustment to the new and abnormal conditions. Gradually the older self gives in. The last stage of the disease, where a happy feeling of comfort and power is nearly always the rule, makes it clear that this adjustment process comes under the pleasure and pain principle, and is one more proof in support of the theory that all the patient's reactions have but one end, one of usefulness from his own point of view.—*C. Nony* (Sorbonne).

2598. **Bradley, C.** *Schizophrenia in childhood.* New York: Macmillan, 1941. vii + 152. \$2.50.—Made possible by the Scottish Rite Masons, this study reports the results of a systematic survey of the available literature since 1900 on childhood schizophrenia. Findings recorded in the literature are summarized in relationship to the various chapter topics of description, incidence, symptomatology, course, types, etiology, psychopathology, laboratory findings, anatomical pathology, diagnosis, differential diagnosis, prophylaxis and treatment, prognosis, and a practical concept of childhood schizophrenia. The author cites, in addition, case histories and findings from his own experience. A final chapter summarizes the present status of information on this general topic. A 118-item bibliography and author and subject indices are given.—*M. H. Erickson* (Eloise Hospital).

2599. **Brickner, R. M., Rosner, A. A., & Munro, R.** *Physiological aspects of the obsessive state.* *Psychosom. Med.*, 1940, 2, 369-383.—The neural basis of obsessive and compulsive states is discussed and illustrated by reference to 7 clinical cases, some of which are epileptic in nature and others with oculogyric crises, and to certain cases of Parkinsonianism cited in the literature. According to the view here presented that a neuro-intellectual system exists and that an obsession is regarded as a function of a neural unit, the content of obsessive thoughts is secondary.—*P. S. de Q. Cabot* (Simmons).

2600. **Brown, S. F., & Shulman, E. E.** *Intramuscular pressure in stutterers and non-stutterers.* *Speech Monog.*, 1940, 7, 63-74.—The intramuscular pressure of 24 male stutterers and 24 male controls was measured by a technique of determining the pressure required to inject a minute amount of saline solution into the body of the biceps muscle with a hypodermic needle. Measurements were made with subjects in a relaxed non-speech situation. No reliable differences between stutterers and non-stutterers were found, nor was there any substantial correlation between intramuscular pressure and age or blood pressure. The implications of the data for stuttering therapy based on relaxation exercises are discussed.—*W. H. Wilke* (New York University).

2601. **Brugger, C.** *Die Vererbung des Schwachsinnns 1939.* (The inheritance of feeble-mindedness 1939.) *Fortschr. Neurol. Psychiat.*, 1941, 13, 1-8.—The present article covers the publications in the field during the year 1939. The problem has so many aspects that many familial studies have not illuminated the situation. Cretinism and mongolism studies do not indicate that these forms of mental deficiency are inherited. Short reference list.—*D. S. Oberlin* (Delaware State Hospital).

2602. **Chamberlain, H. E.** *Neurotic personalities and education.* *Smith Coll. Stud. soc. Work*, 1941, 11, 179-190.—The author discusses the concept of the neurotic and considers some of the characteristics of the neurotic personality. The conclusion is "that we should endeavor to recognize and utilize constructively the neurotic elements in all personalities for whatever potential value they possess rather than to struggle, ill-equipped oft times, to modify or eradicate these elements or to substitute hopelessly other traits equally as frustrating in their own right and drive."—*K. S. Yum* (Chicago).

2603. **Cleckley, H.** *The mask of sanity; an attempt to reinterpret the so-called psychopathic personality.* St. Louis: Mosby, 1941. Pp. 298. \$2.00.—The author emphasizes the present lack of understanding of the psychopathic personality and discusses the prevalence of the disorder on the basis of its frequency in an unidentified federal mental hospital. He then proceeds to present brief episodes from the case histories of 15 different psychopaths. Some general references to the literature are then made and discussed briefly, following which the author raises various general questions about the total problem.—*M. H. Erickson* (Eloise Hospital).

2604. **Crinis, M. de.** *Frühsymptome der Nerven- und Geisteskrankheiten.* (Early symptoms of nervous and mental diseases.) *Z. ärztl. Fortbildg.*, 1939, 36, No. 20.—[Abstracted review; original not seen.] The separation of organic from functional nervous diseases is illogical. Although anatomically demonstrable lesions are not found in the central nervous system in so-called functional psychoses, it is a scientific premise that material changes exist. Suspicious early symptoms of organic psychoses are: rapid decline of memory, disturbances of attention,

lack of self-criticism, and lowering of personality level (manners, breaking through of instincts). Personality degeneration, initially often limited to the emotional sphere, is a much more delicate indicator than neurological signs. Nonspecific "nervous" symptoms are often the indicators of inflammations of the central nervous system or increased intracranial pressure. The facies may be very important in differential diagnosis.—*M. E. Morse* (Baltimore, Md.).

2605. Erickson, M. H. The early recognition of mental disease. *Dis. nerv. Syst.*, 1941, 2, 99-108.—Since the general practitioner is often the first person to come in contact with the early stages of mental disease, it is most important that he have some adequate criterion of normality or abnormality. From clinical material presented as a background, it is concluded that the individual's behavior may best be judged "in terms of what may reasonably be expected of the particular individual, in terms of what is purposeful and useful to the individual, and in terms of what behavior is in keeping and harmony with the general established patterns of behavior of the specific person."—*C. E. Henry* (Brown).

2606. Fervers, C. Umfang und Zunahme der funktionellpsychischen Erkrankungen. (Extent and increase of functional mental diseases.) *Munch. med. Wschr.*, 1939, 86, 1451-1454.—Fervers addressed 3 questions to 300 practitioners one-third of whom were located, respectively, in large cities, small cities, and rural districts. The questions were: (1) Approximately what percentage of your patients have organic mental diseases and neuroses? (2) Is it your opinion that the latter have increased or decreased lately? (3) Do you think that a course in medical psychology in medical schools would help the future physician in the recognition and treatment of neurotics? To the first question, physicians in large cities answered that about 40% of their patients were neurotic cases; rural practitioners, 25%. The replies to the second question were "truly alarming." Physicians in large cities estimated 78% increase; rural physicians, 60%. 97% of physicians in large cities answered "yes" to the third question. As the cause for the increase of neuroses, "increased work tempo" was usually given; only occasionally, "increased mental conflicts." Since "the psychological education of the practitioner is so remarkably slight in comparison with his other knowledge and skills," Fervers stresses the urgency of training medical students in psychology. He further emphasizes the importance of psychological prophylaxis, with special reference to war neuroses.—*M. E. Morse* (Baltimore, Md.).

2607. Finesinger, J. E., & Mazick, S. G. The effect of a painful stimulus and its recall upon respiration in psychoneurotic patients. *Psychosom. Med.*, 1940, 2, 333-368.—Respiratory tracings were obtained from 39 psychoneurotic patients and 14 normal control subjects during the administration of 3 types of painful stimuli and during the patients'

subsequent recall of the experience. Patients were divided into 2 groups: group 1 included diagnoses of hysteria and phobia or anxiety neurosis and group 2, hypochondriasis, reactive depression, compulsion neurosis, or questionable schizophrenia. Results are recorded according to grouped diagnostic classifications and according to each of the following respiratory functions studied: rate and depth, minute respiratory volume, metabolic rate, and expiratory-inspiratory angle. Summaries of 39 case histories are given.—*P. S. de Q. Cabot* (Simmons).

2608. Freund, H. [New theories on constitutional and hereditary factors of stuttering.] *Lijein. Vjesn.*, 1940, 62, 675.—Abstract.

2609. Goldstein, K. The sign of Babinski. *J. nerv. ment. Dis.*, 1941, 93, 281-296.—The author advances the hypothesis that the sign of Babinski is the expression of an alteration in the normal responsiveness to stimulation of flexor and extensor muscle. Under certain conditions the extensors become more easily excitable than the flexors so that dorsal flexion of the big toe takes place when the sole is stimulated. In addition to its appearance in cases with pyramidal tract lesions the phenomenon appears also in some cases of poliomyelitis, muscular atrophy, peripheral neuritis, etc. If associated with a lesion of the pyramidal system, it is an expression of the fact that, due to impairment of the cortex, flight reactions have come to prominence in abnormal strength.—*M. Keller* (Butler Hospital).

2610. Gonda, V. E. Treatment of mental disorders with electrically induced convulsions. *Dis. nerv. Syst.*, 1941, 2, 84-92.—A short review is given of early types of convulsant therapy for mental disorders, in which the objectionable features of the several techniques are emphasized. A rather thorough description of the technique of electroshock follows, and includes data on the preparation of the patient, electrodes and amount of current, and a description of the resulting convulsion. While smaller amounts of current elicit spells comparable to petit mal attacks, the standard treatment is to induce what closely resembles a grand mal convulsion, this resulting from 350 to 800 milliamperes. The convulsions always last between 35 and 45 seconds, two of these being induced weekly. No pain is experienced, and consciousness usually returns after 5-10 minutes. The patient has complete retrograde and anterograde amnesia for the treatment period; the fear reaction characteristic of metrazol shock never develops. In general, the number of complete and partial remissions compares favorably with other types of convulsant therapy, and here also, best results occur in an inverse relationship to chronicity. The importance of an attendant form of psychotherapy is emphasized. 22 references.—*C. E. Henry* (Brown).

2611. Goodman, A. W. Deviation of social competence in selected epileptics. *Amer. J. Orthopsychiat.*, 1941, 11, 104-111.—The Vineland Social Maturity Scale was administered to 3 cases of

epilepsy; improvement, deterioration, and fluctuation in performance were measured.—*R. E. Perl* (Jewish Board of Guardians).

2612. **Harrington, M.** A new design for psychotherapy. *Med. Rec., N. Y.*, 1941, 153, 163-167.—After discussing various aspects of the problem of psychotherapy and emphasizing the greater values of education as contrasted with "evacuation," the author suggests the establishment of a school of mental health which would permit the giving of both individual and group psychotherapy. According to his plan, there would be 18 lectures and 18 discussion periods of 45 minutes each to cover the problems of group therapy, with an additional 6 hours of individual therapy. By such a total of 33 hours of school attendance, the author believes that a foundation can be laid for the development of a set of mental habits which will enable the individual to function successfully.—*M. H. Erickson* (Eloise Hospital).

2613. **Heun, E.** Über die Integrationstypologie von E. R. Jaensch und ihre Bedeutung für Medizin und Psychotherapie. (E. R. Jaensch's integration typology and its meaning for medicine and psychotherapy.) *Fortschr. Med.*, 1938, Nos. 22-25; 1939, Nos. 1 & 2.—[Abstracted review; original not seen.] Heun expresses the objections, which Jaensch himself recognized, to any kind of typology. He then discusses the origin and methods of Jaensch's system and its relations to the personality types of other investigators, Individual Psychology, psychoanalysis, and the collective unconscious. The characteristics of each type are described, the predilection of each for a specific kind of mental disease, and the form of psychotherapy most suitable for each type. Although Jaensch's system lacks a fixed point of reference, Heun considers it a scientific approach to the personality differences which all psychotherapeutic schools have recognized intuitively from the beginning under various terminologies.—*M. E. Morse* (Baltimore, Md.).

2614. **Jong, H. de.** Experimental catatonia in a chimpanzee. *Acta brev. neerl. Physiol.*, 1940, 10, 86-88.—2 chimpanzees received intramuscular injections of 10-50 mg. bulbo-capnine phosphate per kg. One animal (decorticated on one side one month previously) showed no symptoms other than a slight decrease of motor activity, bowing of the head, and salivation. The other animal showed such symptoms as drowsiness, profuse salivation, and marked negativism.—*D. Prager* (U. S. Employment Service).

2615. **Karlin, J. W., & Sobel, A. E.** A comparative study of the blood chemistry of stutterers and non-stutterers. *Speech Monogr.*, 1940, 7, 75-84.—No statistically significant difference between the two groups was found, although there is an indication that the stutterers have a lower mean potassium value than the normals.—*W. H. Wilke* (New York University).

2616. **Kisker, G. W.** Constancy in the manic-depressive syndrome. *J. nerv. ment. Dis.*, 1941, 93,

163-168.—"This study has attempted to point out the existence of two entirely different sets of conditions operating within the general manic-depressive syndrome. A non-statistical analysis of two hundred cases has indicated that approximately two thirds of the patients manifesting this psychosis are suffering from a deep-seated, channelized condition which tends to retain a constant structure throughout the life of the individual, including both periods of hospitalization and non-hospitalization. The remaining one third of the patients within this syndrome are victims of a series of discrete episodes or affective states, none of which are functionally related. The behavior of such individuals is, in each attack, the expression of a specific conflict which is disintegrated during the attack and does not reappear."—*M. Keller* (Butler Hospital).

2617. **Knigge, F.** Über Periodizität und periodische Geistesstörungen. (On periodicity and periodic mental disturbances.) *Fortschr. Neurol. Psychiat.*, 1940, 12, 425-444.—The paper generally surveys investigations into the field of normal periodic process (such as the sleep-movements of flowers), periodicity in abnormal psychic processes, the origins of periodic structure, and periodicity and therapy. Bibliography.—*D. S. Oberlin* (Delaware State Hospital).

2618. **Kuljzenko, A.** [Observations on the status and forms of mental diseases in Serbia and foreign countries.] *Liječn. Vjesn.*, 1940, 62, 663-665.

2619. **Lennox, W. G.** Science and seizures; new light on epilepsy and migraine. New York: Harper, 1941. Pp. 258. \$2.00.—The writer discusses various types of convulsive seizures and migraine, which he considers related disorders. He prefers to think of convulsive disorders as cerebral dysrhythmias on the basis of the evidence derived by electroencephalographic studies. The book is written for the layman and the physician wishing to review the general aspects of epilepsy and migraine. A brief bibliography.—*C. P. Fitzpatrick* (State Hospital for Mental Diseases, Howard, R. I.).

2620. **Lewin, B. D.** Comments on hypomanic and related states. *Psychoanal. Rev.*, 1941, 28, 86-91.—Transient hypomania occurs when a patient has witnessed coitus and identifies himself with both partners; in such patients the neurotic mechanisms of repression, undoing, and reaction formation are conspicuous. The term hypomanic obsessional neurosis is suggested for the more diffuse states marked by typical obsessional symptomatology in a cheerful personality; such patients react to stress by overactivity rather than depression. Among the more prolonged excited states, the mania of the manic-depressive personality usually represents a reaction to a loss, or an assertion of narcissistic autarchy.—*G. Brighouse* (Occidental).

2621. **Lotmar, F.** Zur Lehre von der erschwerten Wortfindung und ihrer Rückwirkung auf das Denken des Aphasischen. (The theory of difficulty in word-finding and its repercussion on the aphasic's thinking.) *Schweiz. Arch. Neurol. Psychiat.*, 1940, 45,

341-426.—Lotmar gives an exhaustive review of his controversy with Binswanger. His own position is that naming difficulties are due, not to noetic disturbances (Binswanger), but entirely to decreased control of speech forms, especially for the abstract. The intermediate unsuccessful trials are links in a unitary thought-act, purposive, circumscribed, painful efforts toward a goal, their effectiveness limited only by impeded access to the speech medium. Difficulty in word-finding has an inhibitory effect on thinking, particularly abstract thinking. The aphasic's disabilities are only a special application of the domination of the *Aufgabe* in normal psychology. Understanding without ability to name adequately occurs in normal persons, especially in the case of proper names and technical terms, and hunting for the words takes place through associations radiating from accessible verbal terms. In fact, the psychology of normal concentrated thought is the best basis for study of the nature and development of word-finding disturbances in aphasics.—*M. E. Morse* (Baltimore, Md.).

2622. Mailloux, N. M., & Newburger, M. The work curves of psychotic individuals. *J. abnorm. soc. Psychol.*, 1941, 36, 110-114.—The study was carried out to find whether or not continuous response to color stimuli might be valuable in determining the degree of mental disorganization in psychotic individuals. It was found that psychotics block more frequently and respond less frequently than normal individuals, an indication, that either the phenomenon of refractory phase is not the only important factor in the development of a block or else that in psychotic individuals some other factor, unknown to us at present, plays an important part in the development of the block.—*C. H. Johnson* (Portland, Ore.).

2623. Milling, C. J. Exhaustion due to mental excitement. *J. nerv. ment. Dis.*, 1941, 93, 297-309.—360 cases in which the cause of death was given as "exhaustion due to mental excitement" are analyzed with respect to age, race, sex, physical findings, diagnosis, number of attacks and duration, civil condition, education, occupation, etc.—*M. Keller* (Butler Hospital).

2624. Missriegler, A. On the psychogenesis of narcolepsy. (Epitomized and translated by B. Karpman.) *J. nerv. ment. Dis.*, 1941, 93, 141-162.—A detailed report of a case of narcolepsy which was cured by psychoanalytic treatment. The material is presented under the following headings: family background, illnesses, interest in hypnotism, sex life, dream life, comments, and summary.—*M. Keller* (Butler Hospital).

2625. Mohr, P. Das künstlerische Schaffen Geisteskranker und seine Beziehungen zum Verlauf der Krankheit. (The artistic work of psychotics and its relation to the course of the disease.) *Schweiz. Arch. Neurol. Psychiat.*, 1940, 45, 427-446.—Mohr gives observations on the spontaneous creations, chiefly paintings, of his schizophrenic patients. Only a small proportion have any creative urge. They

often work sporadically, without obvious stimulation. Some are most productive when hallucinated or excited; others work unwillingly but obsessively. Their work, when compared over a period of years, develops a certain mechanization, but does not degenerate parallel with the progress of the disease. The productions are not up to the patient's pre-psychotic standard. Although patients seldom depict their hallucinations directly, uninitiated observers always recognize these drawings as weird. The symbolism is to be interpreted analytically. Affectivity is indicated most clearly by the use of color. Increasing brightness and purity run parallel with clinical improvement. Self-expression is the patient's effort to free himself from a burden, and also a strained attempt to get into emotional relationship with the environment, often his only rapport. It is thus an attempt at self-cure.—*M. E. Morse* (Baltimore, Md.).

2626. Moore, M. Report on the symposium on alcoholism of the Research Council on Problems of Alcohol. *Quart. J. Stud. Alcohol*, 1941, 1, 794-803.—Short abstracts of most of the papers delivered at the first symposium at Philadelphia, December 27-29, 1940, are given.—*W. L. Wilkins* (Milwaukee, Wis.).

2627. Nielsen, J. M. The unsolved problems of apraxia and some solutions. *Bull. Los Angeles neurol. Soc.*, 1941, 6, 1-20.—After reviewing 2 original cases and 6 from the literature, the author classifies apraxias as follows: (1) cortical motor pattern apraxia, or loss of limited but coordinated movements, as in loss of finger movement with preservation of function of upper limb as a whole; (2) ideokinetic apraxia, or loss of complex, purposeful acts with retention of motility in the parts normally used; (3) ideational apraxia, or loss of capacity to execute a series of related acts, such as lighting a cigarette, although each component may be performed on request.—*D. K. Spelt* (Mississippi).

2628. Rado, S. A critical examination of the concept of bisexuality. *Psychosom. Med.*, 1940, 2, 459-467.—The origins of the idea of bisexuality are to be found in the primeval emotional needs of animistic man and long antedate the scientific era. The concept was incorporated within psychiatry in the late 19th century and at the present time needs careful examination and further clarification by psychoanalysts. Biologically, bisexuality does not exist in man or in any other of the higher vertebrates.—*P. S. de Q. Cabot* (Simmons).

2629. Rees, J. R. Strategic planning for mental health. *Ment. Hlth. Lond.*, 1940, 1, 103-106.—An address to the National Council for Mental Hygiene emphasizes the necessity for a national mental hygiene program in view of the stress of war time life. In order to spread the desire for such a program, a press service, local councils, and discussion groups should be established.—*D. Miller* (U. S. Employment Service).

2630. Rennie, T. A. C. Psychobiological therapy. *Amer. J. Psychiat.*, 1940, 97, 611-622.—"Psychobiology, or ergasiology, refuses to accept a psycho-

pathology which is not out and out biological, that is, structure-bound as well as meaning-bound, working always in a setting or system of meanings." In summary, "psychobiological therapy must concern itself with every component of personality organization, utilizing leads at any level of integration, recognizing man not only as an individual but as a socially integrated unit, remaining free to work with any methods of general science that offer melioration, committing himself and the patient to a philosophy or way of life which takes into consideration the specific needs and limitations and opportunities within the person."—R. Goldman (Boston Psychopathic Hospital).

2631. Robb, R. W., Kovitz, B., & Rapaport, D. Histamine in the treatment of psychosis; a psychiatric and objective psychological study. *Amer. J. Psychiat.*, 1940, 97, 601-610.—Histamine was used because of its effect in causing alteration in capillary permeability, alteration in cerebral blood flow, secondary effects of a vascular shock on cerebral function, and its further psychobiologic action as a non-specific "shock to the bodily economy." To establish the psychological change elicited by the drug the Rorschach test was given before and after the course of treatment. On each of the 24 subsequent days, the patients were asked to recall a given story which had been presented visually and acoustically. Psychiatrically, no spectacular change on the group as a whole was effected. In the 10 catatonic patients, the change on the Rorschach was in the same direction, but not so significant, as when metrazol is used. There was an increased movement and color score after treatment, "indicating a more free and responsive affectivity and psychomotility, as well as decreased blocking." The decrease in anatomical responses indicated a decrease in blocking. The recalled story was changed basically by the catatonics. "The psychological effects of histamine as of metrazol appear to depend on the personality and illness structure of the patient."—R. Goldman (Boston Psychopathic Hospital).

2632. Roggenbau, C. H., & others. Gegenwartsprobleme der psychiatrisch-neurologischen Forschung. (Present day problems in psychiatric-neurological research.) Stuttgart: Enke, 1939. RM 20.—[Abstracted review; original not seen.] This is a series of lectures given at the international postgraduate course in Berlin in 1938. 19 authors contribute to a discussion of various psychiatric and neurological problems.—M. Keller (Butler Hospital).

2633. Rothschild, D., & Sharp, M. L. The origin of senile psychoses: neuropathologic factors and factors of a more personal nature. *Dis. nerv. Syst.*, 1941, 2, 49-54.—Several cases are described to illustrate the point that wide discrepancies may occur between anatomic and mental disturbances as found in senile psychotics. Certain individuals are able to resist or compensate for cerebral damage, other cases are more vulnerable, i.e., show severe personality changes with slight cerebral damage.

"These observations suggest that the qualities of the living person rather than the neuropathologic alterations determine whether or not a psychosis will occur in some cases. The role of the structural disturbances probably varies from one extreme, at which they wholly account for the psychosis, to the other at which they are only a minor factor. A picture of the true situation is revealed, not by isolated consideration of any single feature, but by a scrutiny which seeks to determine the relative importance of anatomic factors and factors of a more personal nature in each case."—C. E. Henry (Brown).

2634. Savitsky, N., & Tarachow, S. Lilliputian hallucinations during convalescence of scarlet fever. *J. nerv. ment. Dis.*, 1941, 93, 310-311.—A report of a case of Lilliputian hallucinosis occurring in a 4 year old child during the third week of scarlet fever.—M. Keller (Butler Hospital).

2635. Schultz, J. H. Psyche und Allergie. (Psyche and allergy.) *Z. ärzt. Fortbildg.*, 1938, 35, No. 2.—[Abstracted review; original not seen.] In all functional pathological syndromes a number of causal factors (inflammatory, vasomotor, psychic, etc.) coexist. The comparative freedom from symptoms following therapeutic elimination of one of these factors leads to the false conclusion that the cause of the condition has been found. The sequence psychocerebrum-midbrain-medulla-neurovegetative system may possibly be the bridge to the understanding of reciprocal psychophysical influences. Hence depth psychotherapy is not only physiologically correct but medically indicated. The psychic factor in the etiology of allergies is often striking. Schultz reports a patient with severe asthma who has been free from attacks for 6 years following exclusively mental treatment, although the skin tests have remained unchanged.—M. E. Morse (Baltimore, Md.).

2636. Semrad, E. V., & McKeon, C. C. Social factors in old age psychosis. *Dis. nerv. Syst.*, 1941, 2, 58-62.—A short account is presented of community adjustment of 14 mental patients committed for the first time at the age of 70 plus. Most patients had a history of long standing personality difficulties and financial dependency. The community had been remarkably tolerant of their preponderantly asocial behavior, while the interest shown by the immediate relatives of the patients was more variable. An important precipitating factor was found to be the removal of protective support when the original home environment was disrupted.—C. E. Henry (Brown).

2637. Shakow, D., Dolkart, M. B., & Goldman, R. The memory function in psychoses. *Dis. nerv. Syst.*, 1941, 2, 43-48.—"From a study of certain aspects of the memory function in a representative sample of normal adults from the second through the ninth decades, norms are made available for the evaluation of memory in two psychoses of the aged: psychosis with cerebral arteriosclerosis and senile psychosis. The results indicate consistently, but

not markedly, poorer performance of the psychotic groups when compared with the normal. Of the patient groups, the seniles are invariably poorer than the arteriosclerotics. With respect to institutionalization, the correlations indicate that this factor has no effect on performance." These data indicate that memory disturbance is mainly due to old age.—C. E. Henry (Brown).

2638. Simon, B., & Kaufman, S. H. **Psychiatric problems of the aged.** *Dis. nerv. Syst.*, 1941, 2, 62-65.—The authors discuss the psychiatric problems associated with elderly patients and some practical methods for dealing with these problems. Medication as indicated, occupational therapy, physical and psychotherapy, and recreational procedures are all discussed and evaluated. Emphasis is placed on the fact that these cases may often be restored to society through retraining.—C. E. Henry (Brown).

2639. Speer, G. S. **The problem of pseudo-feeble-mindedness: a reply.** *J. educ. Psychol.*, 1940, 31, 693-698.—According to Bijou (see XIV: 1344) "test depressors" or retarded language development account for failure on certain subtests of the Stanford-Binet. Subjects who show such performance and who have very low IQ's on that account are not feeble-minded. This contention is discussed and criticized.—R. M. Bellows (Maryland).

2640. Sprague, G. S. **Ideas of contamination as defense against sexuality.** *Amer. J. Psychiat.*, 1940, 97, 659-666.—The author states "that when one has severe conflicts over his sexuality one of the possibilities of reaction is to replace the sex topic with the notion of infection, contamination, poison and the like and that the process involved in achieving this substitution may be described in terms of concept formation. . . . In detailing the process, it appears that with some of today's social-cultural attitudes concerning sex and with some of its medical and bacteriological aspects, contamination ideas offer a particularly parallel conception which can be substituted with certain very definite dynamic advantages even at the expense of reality."—R. Goldman (Boston Psychopathic Hospital).

2641. Stokes, J. H., & Beerman, H. **Psychosomatic correlations in allergic conditions; a review of problems and literature.** *Psychosom. Med.*, 1940, 2, 438-458.—The authors review an extensive literature dealing with current dermatological conceptions applicable to the psychogenic field with reference to vasomotor and sweat phenomena, the pruritus mechanism, psychoneurogenous "allergens," the allergic personality and child, guilt and anxiety, tension and conflict, hysteria, hypochondriasis and involutional melancholia, sex and eroticism, and parent-child relationships.—P. S. de Q. Cabot (Simmons).

2642. Weigl, E. **On the psychology of so-called processes of abstraction.** (Trans. by M. J. Rioch.) *J. abnorm. soc. Psychol.*, 1941, 36, 3-33.—In an experiment with Holmgren wool samples, patients with cerebral lesions were able to match only the identical skeins. With cardboard figures, the

instruction to sort was first understood by the patients in the sense of to build, to make patterns; only through appropriate coercive conditions did the quality of color, form, or size become effective. Although the patients achieved some kind of arrangement of the figures, they could not voluntarily give up the kind of arrangement which they had just achieved in favor of another arrangement. All theories of abstraction have this basic point of view in common: the reaction to "partial conformities of several objects of perception" must be preceded by a stage in which these "precepts" are experientially present as definite objects with a definite number of well-defined given properties. The actual feat of abstraction consists in either voluntarily or involuntarily singling out from all the given contents. (See II: 62, 63.)—C. H. Johnson (Portland, Ore.).

2643. Wittels, F. **The phantom of omnipotence.** *Psychoanal. Rev.*, 1941, 28, 163-172.—"No human being can live without the phantom of omnipotence." The case history of a patient with delusions of omnipotence through overcompensation for loss of the pampering he had received as an infant is presented.—G. Brighouse (Occidental).

2644. Worchel, P., & Lyster, J. G. **Effects of prefrontal lobotomy on depressed patients.** *J. Neurophysiol.*, 1941, 4, 62-67.—Bilateral frontal lobotomies were performed on 11 patients and unilateral lobotomies on 2 others. All patients became more normal with respect to emotional tone after the operation, but the emotional tone varied in the different patients after a period of time. 7 became excited, disturbed, and hyperactive. The others were either at home and getting along fairly well or remained in the hospital with some depression. Attempts to measure deterioration of intellectual performance by the scatter and by comparison of Stanford-Binet MA with vocabulary age were rather inconclusive. The 10 patients studied psychometrically all showed some evidence of deterioration, however; all but one failed the free association test at the 10 year level of the Binet. Delusions and hallucinations were reduced but not abolished by the operation. A tendency to reminisce was noted following the operation.—D. B. Lindsley (Brown).

2645. Young, C. W. **The possible use of the memory span for the indication of complexes.** *J. abnorm. soc. Psychol.*, 1941, 36, 115.—With series that approach the maximum span of a subject, the closest attention is required, and the slightest disturbance may result in a breakdown of recall. Hence, it might be assumed that the span would provide an instrument for the detection of the inhibitory influence of a complex upon any of the words or numbers in a series. Since the subject must react to the entire series at once, he is likely to be unaware of any difference in his reaction to the complex indicators.—C. H. Johnson (Portland, Ore.).

[See also abstracts 2461, 2490, 2557, 2589, 2652, 2732, 2744, 2792, 2832, 2845, 2847.]

PERSONALITY AND CHARACTER

2646. Allport, F. H., & Frederiksen, N. **Personality as a pattern of teleonomic trends.** *J. soc. Psychol.*, 1941, 13, 141-182.—"Eighteen students each wrote predictions, upon the basis of impressional knowledge, of responses to a verbal dilemma which they thought might be made by each of five acquaintances. These acquaintances afterwards wrote their own responses to the same dilemma. The same eighteen students acted as matchers in the experiment, each attempting to match correctly the predictions and responses, except those contributed by himself. Matchings were made in sets of five predictions and five responses, arranged in chance order. It was found that 4.9% more matchings were correct than would be expected by chance, the difference being statistically significant." The matchers used expressed affirmation or negation, style of writing, and attitude of writer as cues in matching, but none of these accounted for the full number of correct matchings. "When the teleonomic pattern has been successfully predicted . . . , the proportion of successful matchings is much higher." These results tend to confirm the hypothesis that the uniqueness of a personality is probably "due to the existence of a plural but small number of differing trends which, in order to be understood, had to be described in teleonomic terms."—G. Brighouse (Occidental).

2647. Bonney, M. E. **The validity of certain techniques of gathering psychological data, with special reference to personality questionnaires.** *J. soc. Psychol.*, 1941, 13, 103-122.—Self-estimates by Vth and VIth grade pupils of their absences, library book withdrawals, Sunday school attendance, and weekly spelling scores for one semester were compared with actual performances. The average amount of complete accuracy was 27%, and of approximate accuracy 43%. Pupils erred by over-estimating Sunday school attendance and spelling scores. Very little relation was found between chronological age or IQ and accuracy of estimate. The results uphold the accuracy of self-estimates in the measurement of personality traits, but the technique is much more reliable for group comparisons than for work with individuals.—G. Brighouse (Occidental).

2648. Clark, W. W., Tiegs, E. W., & Thorpe, L. P. **California test of personality; a profile of personal and social adjustment. Intermediate Form A (grades 7-10).** Los Angeles: California Test Bureau, 1940. Pp., Manual, 16; Test, 8. \$1.00 per 25, \$.025 for specimen set.—"The major purpose of the test is to reveal the extent to which the pupil is adjusting to the problems and conditions which confront him and is developing a normal, happy, and socially effective personality." The profile is divided into two sections: (1) self-adjustment (composed of: self-reliance, sense of personal worth, sense of personal freedom, feeling of belonging, freedom from withdrawing tendencies, and freedom from nervous symptoms) and (2) social adjustment

(composed of: social standards, social skills, freedom from anti-social tendencies, family relations, school relations, and community relations). Reliabilities obtained with 792 cases by the split-half method, corrected by the Spearman-Brown formula, are .932 (PE est. = 3.7) for total adjustment, .898 (PE est. = 2.5) for self-adjustment, and .873 (PE est. = 2.6) for social adjustment. Percentile norms are given, as well as sample profiles with interpretations. Answer key and class record sheets are provided.—L. M. McCabe (Cambridge, Mass.).

2649. Dantín, J. **La práctica de la capillaroscopia en el estudio de la personalidad.** (The use of capillaroscopy in the study of personality.) *Psicotecnia*, 1940, 1, 168-181.—This is a summary of Jaensch's works in this field. The capillaries and their network are a biological unit; the common cause of general disturbances and of capillary disorders in case of abnormality lies probably in the regulatory center of metabolism, growth, and cerebral differentiation. Capillaroscopy is not a diagnostic procedure; but a capillary anomaly is sometimes the most apparent sign of a psychophysical disturbance which may consist in mental deficiency or in metabolic, vegetative, or reactional disorders. Jaensch distinguishes 3 fundamental biological types on an evolutionary basis.—J. E. Bader (Brandon State School).

2650. Dudycha, G. J. **A scale for measuring attitudes toward dependability.** *J. soc. Psychol.*, 1941, 13, 59-69.—The Seashore-Hevner modification of the Thurstone-Chave method of attitude scale construction was used to prepare a scale embodying the following 8 aspects of dependability: accuracy, persistence, punctuality, regularity, consistency, honesty, faithfulness, and responsibility. The final scale consists of 27 statements.—G. Brighouse (Occidental).

2651. French, T. M. **An analysis of the goal concept based upon study of reactions to frustration.** *Psychoanal. Rev.*, 1941, 28, 61-71.—The belief in the effectiveness of a wish as a simple force leading to fulfillment is fallacious for it fails to consider the importance of (1) knowing the method of achieving the goal, and (2) using motor energies effectively. Successful reactions to frustration are (1) increased concentration on original goal, and (2) deflection of goal to avoid obstacle. Unsuccessful reactions to frustration are (1) futile struggle against obstacle as a substitute goal, and (2) neurotic substitution of inadequate goal. Disintegration of the goal-seeking mechanism occurs when in the primary process the goal concept loses its dominance, and when emotion inhibits the effectiveness of motor energies.—G. Brighouse (Occidental).

2652. Kasanin, J., & Handschin, S. **Psychodynamic factors in illegitimacy.** *Amer. J. Orthopsychiat.*, 1941, 11, 66-85.—This study of the psychological factors in illegitimacy is based on a specially selected group of 16 unmarried mothers, 7 of whom had more than one illegitimate child. These girls were native born whites, were neither

psychotic nor feeble-minded, and came from average American homes. They were not interested in their pregnancies, did not desire to marry the putative fathers, were not promiscuous, were frigid in sex relations, and were strongly attached to their families, especially their fathers. The men responsible for their pregnancies were often much older men. "On the basis of these data, and especially on the basis of the fact that pregnancy and birth of the child seems to be quite apart from the rest of the girl's personality and interest, the authors offer the hypothesis that these pregnancies represent hysterical dissociation states in which the girls act out their incest phantasies as an expression of the Oedipus situation."—*R. E. Perl* (Jewish Board of Guardians).

2653. Marston, W. M. *March on! Facing life with courage*. New York: Doubleday, Doran, 1941. Pp. 311. \$2.50.—An account of the ways and means of overcoming inferiorities and feelings of insecurity, cultivating adequate love relationships, harnessing one's potentialities and abilities, and maintaining the zest for adventure, all in order to achieve happiness.—*P. S. de Q. Cabot* (Simmons).

2654. McQuitty, L. L. *An approach to the nature and measurement of personality integration*. *J. soc. Psychol.*, 1941, 13, 3-14.—Personality integration is measured by a system of scoring the concomitance of answers on the Bernreuter Personality Inventory and on the Strong Vocational Interest Blank. This test of concomitance is sensitive to differences in estimated integration, and shows less personality integration for mental hospital patients than for college students.—*G. Brighouse* (Occidental).

2655. Mecklin, J. M. *The passing of the saint; a study of a cultural type*. Chicago: University of Chicago Press, 1941. Pp. ix + 206. \$2.00.—The author presents a discussion of the psychological and sociological factors of the feudal ages which produced the saint, as well as an account of more recent forces which have discredited the saintly virtues. Biographies of St. Augustine, Bernard of Clairvaux, and St. Francis reveal the interaction of these forces in the "citizen of two worlds."—*G. S. Speer* (Central YMCA College).

2656. Middleton, W. C. *Personality qualities predominant in campus leaders*. *J. soc. Psychol.*, 1941, 13, 199-201.—30 campus leaders were each rated by 4 or more students on the North Carolina Scale for Fundamental Traits. The 6 highest mean ratings were on: character, intelligence, persistence, accuracy, sociability, and judgment. The 6 lowest ratings were on: radicalness, modesty, emotionality, extraversion, decisiveness, and adaptability.—*G. Brighouse* (Occidental).

2657. Ralph, J. *Self-analysis made simple; a guide to contentment*. New York: Dial Press, 1939. Pp. xv + 249. \$2.25.—The author presents for the layman a conception of self-analysis for the prophylaxis and the correction of "deeply seated character and temperamental defects." Representative chapter headings are: how thoughts are made; taking a

mental sounding; putting a dream into cold storage; will-power while you wait; grubbing for mind worms; and digging up thought roots. There is neither bibliography nor index.—*M. H. Erickson* (Eloise Hospital).

2658. Sachs, H. "The man Moses" and the man Freud. *Psychoanal. Rev.*, 1941, 28, 156-162.—In his early years Freud identified himself with Hannibal, who represented the Semitic warrior-ideal. At that time Freud was ambitious for political power in order to open up equal opportunities for racial minorities. With maturity, his political fervor turned to scientific curiosity, and his interests turned from the warrior-ideal to the intellectual ideal of Moses.—*G. Brighouse* (Occidental).

2659. Schettler, C. *Some antecedent concepts of personality trait*. *Psychol. Rev.*, 1941, 48, 165-175.—The concept of personality trait, little known before 1900, had its historical antecedents whose original meanings have changed, like soul and faculty. The same questions were fundamental, (1) their mutability, (2) their specificity versus generality, (3) their elemental versus complex quality, and (4) their distribution. On the first and third problems the historic concepts of instinct and faculty have exerted a strong influence; but opinion has been divided as to what abilities, if any, are immutable. Answers to the second question have largely hinged on the number of faculties or traits recognized; the fewer the number, the more general their character has been considered, as with the Spearman versus the Thorndike theories of intelligence. Question 4, whether there is a quantitative or qualitative distribution of differences between animals and humans, primitive and civilized, child and adult, normal and abnormal, has hinged on the acceptance of the evolutionary doctrine and the doctrine of the normal frequency distribution curve. A knowledge of the past history of concepts can be an invaluable guide to the contemporary research worker.—*A. G. Bills* (Cincinnati).

2660. Tiegs, E. W., Clark, W. W., & Thorpe, L. P. *California test of personality; a profile of personal and social adjustment. Adult series, Form A*. Los Angeles: California Test Bureau, 1940. Pp. Manual, 8; Test, 8. \$1.00 per 25; \$0.25 for specimen set.—This test "has been designed to identify and reveal the status of certain fundamental characteristics of human nature which are highly important in determining employability and general success in personal, social, or vocational relations." Regarding traits tested and reliability this series is similar to the intermediate form (see XV: 2648). Percentile norms are presented. Answer key and class record sheet are included.—*L. M. McCabe* (Cambridge, Mass.).

2661. Winch, R. F. *Personality characteristics of engaged and married couples*. *Amer. J. Sociol.*, 1941, 46, 686-697.—Although associations have previously been established between scores on personality tests and scores on marital happiness and marital adjustment indexes, the nature of the

association and the direction of causation have not been systematically explored. By showing that a similar association obtains between the scores of engaged persons on personality tests and on an adjustment in engagement index, this paper indicates that the previously demonstrated relationship is not a result of the marital halo effect. The data are interpreted as providing partial evidence to support the view held by Terman that personality factors determine aptitude for marriage.—*D. L. Glick* (Brown).

2662. Winslow, C. N., & Frankel, M. N. A questionnaire study of the traits that adults consider to be important in the formation of friendship with members of their own sex. *J. soc. Psychol.*, 1941, 13, 37-49.—A 5 point scale questionnaire, listing 40 physical and psychological traits, was answered by 100 college men and 100 college women. The most important characteristics of friends were those producing congeniality in face-to-face contacts, e.g. loyalty, ability to be confided in, frankness, and good-sportsmanship. Traits most disliked were hypersensitivity, garrulity, and braggartry about conquests with the opposite sex. Less personal characteristics, such as religious and political beliefs, economic status, and intelligence, were rated as relatively unimportant. In general the two sexes liked and disliked the same characteristics.—*G. Brighouse* (Occidental).

[See also abstracts 2492, 2517, 2565, 2567, 2568, 2596, 2613, 2688, 2689, 2694, 2752, 2760, 2796, 2820, 2854.]

GENERAL SOCIAL PROCESSES

(incl. Esthetics)

2663. [Anon.] A psychological 'hinge' in national defence. *Nature, Lond.*, 1940, 146, 74-75.—The weak psychological "hinge" in modern defensive warfare is that point where military discipline ends and civil organization begins. In previous wars the dividing line was clear-cut; today, however, the policy of the Germans is to disrupt the accepted patterns of warfare and confuse the civilian's conception of his own role. While subject to indiscriminate attack from the air, his armed resistance is not sanctioned by the laws of warfare. It is suggested that the civilian population be given a more definite role in support of the military specialist, and be taken more into the confidence of the military authorities.—*F. W. Finger* (Brown).

2664. [Anon.] Gallup and Fortune polls. *Publ. Opin. Quart.*, 1941, 5, 133-165.—A topically arranged compilation of AIPO and Fortune poll results for the quarter ending December, 1940.—*K. B. Breland* (Minnesota).

2665. Bayton, J. A. The racial stereotypes of Negro college students. *J. abnorm. soc. Psychol.*, 1941, 36, 97-102.—The technique used by Katz and Braly was used with 100 Negro students. They displayed racial stereotypes highly similar to those possessed by white college students. The two groups

agreed on these traits of Negroes: superstitious, lazy, happy-go-lucky, very religious, ostentatious, loud, and musical. They differed in that whites assigned to Negroes the adjectives ignorant, stupid, naive, slovenly, and physically dirty; whereas Negroes listed intelligent, progressive, faithful, and imitative. Propaganda is more influential in the formation of stereotypes than are personal face-to-face contacts.—*C. H. Johnson* (Portland, Ore.).

2666. Bennett, B. An analysis of the intrinsic factors that constitute a stable attitude. *Trans. Kans. Acad. Sci.*, 1940, 43, 329-331.—The effects of propaganda as measured by a breakdown scale of attitudes were studied with particular reference to the degree of discrimination originally displayed towards various aspects of the proposition upon which attitudes were obtained.—*W. A. Varvel* (Chicago).

2667. Benson, L. E. Studies in secret-ballot technique. *Publ. Opin. Quart.*, 1941, 5, 79-82.—In a half interview, half secret-ballot poll taken in Lisbon township, Maine, just prior to the state election, the undecided vote was reduced from 21% on the interview to 9% on the secret ballot. A similar secret ballot on the 1940 presidential election resulted in a drop from 16% to 2% in the undecided vote. A poll was also taken prior to the national election in Erie County, Ohio, long famous as a political barometric area, and here again the undecided vote was reduced to about one third on the secret ballot. Also, the poll showed Willkie the winner (about 56%). With the exception of one year, this is the first time since 1884 that Erie County's vote has deviated more than 4% from the national ballot and is the first time it has ever favored the losing side. The fact that Erie County's population is composed of 26% first-generation Germans and Italians is advanced as an hypothesis to explain the results.—*K. B. Breland* (Minnesota).

2668. Bernatzik, H. A. *Die grosse Völkerkunde; Sitten, Gebräuche und Wesen fremder Völker.* (Comprehensive ethnology; customs, usages, and nature of foreign peoples.) 3 vols. Leipzig: Bibliogr. Inst., 1939. RM 48.—[Abstracted review; original not seen.] In more than 1000 pages Bernatzik takes up the historical development and aims of the science, colonial ethnology, and general problems which, aside from studies of the borderland between biology and culture, have been little discussed in recent years. He has chosen 15 younger collaborators, adherents of the historical school, who acted as field workers in special departments. Index and extensive bibliography.—*M. E. Morse* (Baltimore, Md.).

2669. Bogardus, E. S. *Sociology.* (Rev. ed.) New York: Macmillan, 1941. Pp. xii + 567. \$3.00.—This is an introductory text, with the social group as its central concept. Of the 3 approaches discussed in Part I, ecological, cultural, and psychosocial, the last is the most important. It takes into account various impulses and drives, habits, attitudes, communication, and social interaction. Part

II discusses generally the more important social groups. Part III deals more specifically with the dynamic and changing aspects of group relations. Personality is formed and develops under the influence of group controls.—*H. A. Gibbard* (Brown).

2670. **Britt, S. H., & Menefee, S. C.** *The Dies Committee and public opinion in 1939.* *J. abnorm. soc. Psychol.*, 1941, 36, 91-96.—Changes in opinion regarding persons and groups attacked by the Dies Committee were measured in: control group I prior to hearings; control group II during the hearings; and experimental group III, to whom were read complete accounts of the hearings just after publication of the stories. The downward shifts in opinion were both more numerous and greater in the experimental group than in the control groups. The investigation represents a methodological advance in realistic opinion-experimentation by (1) establishing the feasibility of prediction in planning experiments in propaganda; and (2) by demonstrating the use of controlled measurement of opinion change on a controversial issue in response to actual newspaper stories.—*C. H. Johnson* (Portland, Ore.).

2671. **Bryan, A. I., & Wilke, W. H.** *A technique for rating public speeches.* *J. consult. Psychol.*, 1941, 5, 80-90.—A rating scale for quantitatively measuring the reactions of an audience to public speakers is discussed according to construction, methods of scoring, interpretation, reliability, and validity. A sample of the scale is given.—*P. S. de Q. Cabot* (Simmons).

2672. **Bryant, G. E.** *Recent trends in racial attitudes of Negro college students.* *J. Negro Educ.*, 1941, 10, 43-50.—A scale of 37 statements was constructed and administered to 90 white and 615 Negro students to measure the degree of their tolerance toward American white people. Differences between Northern and Southern Negroes, the sexes, graduate and undergraduate students, white and Negro, and the various student groups are indicated. The various items are discussed, and a composite picture of the Negro student is given.—*W. E. Walton* (Nebraska).

2673. **Burks, B. S.** *Social promotion in relation to differential fecundity.* *Hum. Biol.*, 1941, 13, 103-113.—"The problem of social promotion (by occupational and educational criteria) in its relation to fecundity has been investigated by means of family records selected in three groups according to socio-economic status of two generations of ascendants. It is found that socially promoted individuals come from smaller sibships than do either individuals of similar socio-economic background who are not promoted, or individuals who are offspring of socially promoted parents." Reasons for this are discussed.—*O. W. Richards* (Spencer Lens Company).

2674. **Ciocco, A.** *Parity order of births, age of mother, and socio-economic status.* *Hum. Biol.*, 1941, 13, 64-87.—Since 1920 the highest economic class (owners, managers, officials, and professional men) has increased its contribution to natality in

Washington County, Md. The increase is limited to 3rd births and under, and is greatest for first births. Records from 1898 to 1938 were studied. For the first births the rise begins in 1915; for the second, in 1920; and for the third in 1925. At equal age the mothers of the lower economic classes are further advanced in reproduction than the mothers of the highest. The increased contribution to natality of the highest class may be a result of decreasing contributions in the lower classes.—*O. W. Richards* (Spencer Lens Company).

2675. **Cole, F. C.** *An anthropologist's view of race.* *Amer. Teacher*, 1940, 24, No. 5, 8-11.—A definition of race, and an account of racial differences and their origins.—*S. S. Sargent* (Barnard).

2676. **Crossley, A. M.** *Methods tested during the 1940 campaign.* *Publ. Opin. Quart.*, 1941, 5, 83-86.—This is a brief discussion of the author's pivotal state method of polling and associated problems and techniques.—*K. B. Breland* (Minnesota).

2677. **Cutner, H.** *A short history of sex-worship.* London: Watts, 1940. Pp. xiii + 222. 8s. 6d.

2678. **Davy, G.** *Les sentiments sociaux et les sentiments moraux.* (Social and moral feelings.) In *Dumas, G., Nouveau traité de psychologie*. Vol. VI, Bk. 2. Pp. 153-240. Paris: Alcan, 1939.—In the introduction theories of feelings and emotions in general are discussed. Part 1 deals with theories of the origin of social feelings, part 2 with theories of moral feelings. It is concluded that moral feelings are complex phenomena which cannot be studied by psychology or sociology alone, but require a synthesis of those two sciences. Bibliography.—*C. Nony* (Sorbonne).

2679. **Delacroix, H.** *Les sentiments esthétiques et l'art.* (Esthetic feelings and art.) In *Dumas, G., Nouveau traité de psychologie*. Vol. VI, Bk. 2. Pp. 253-316. Paris: Alcan, 1939.—The various chapters deal with: (1) theories of art, (2) the artist and his work, (3) contemplation, (4) art and arts, (5) music, (6) phonetic arts, and (7) plastic art. It is concluded that, far from being a mere appearance, the forms of art contain more reality than those of the "real" world. Art represents a useful help to practical life, though not purposely so. Bibliography.—*C. Nony* (Sorbonne).

2680. **Edwards, A. L.** *Political frames of reference as a factor influencing recognition.* *J. abnorm. soc. Psychol.*, 1941, 36, 34-50.—The political frame of reference of the subjects used was a determining factor in their judgments of (1) the manner in which the speaker presented a neutral speech on a controversial subject pertinent to that frame and (2) the point of view expressed by the content of his speech. That is, subjects with favorable attitudes toward the New Deal regarded both the speaker and the content of his speech as favorable to the New Deal, whereas subjects with unfavorable attitudes regarded them as unfavorable. Material which harmonized was recognized significantly better than material which conflicted with one's frame of reference. There was a consistent, but statistically

unreliable, tendency for the relative amount forgotten to be related to the degree of conflict between the material and the frame of reference.—C. H. Johnson (Portland, Ore.).

2681. Farnsworth, P. R. The relation of the auditory capacities to the feeling of being musical. *J. Musicol.*, 1941, 2, 119-122.—Student subjects who thought themselves to be more musical than average were compared on the earlier Seashore music test battery with others who considered themselves to be less musical than average. On every test the mean score of the former was significantly above that of the latter. The difference between the two group means was greatest in the case of the measure of tonal memory. A similar picture was obtained when the comparisons were run in terms of percentages of subjects.—P. R. Farnsworth (Stanford).

2682. Fendrick, P. Newspaper reading interests of high school and college students. *J. educ. Res.*, 1941, 34, 522-530.—Over 400 protocols regarding likes and dislikes for newspaper reading were obtained from high school students in grades X-XII and from college students during their last 3 years in college. A list of 35 categories was prepared with such topics as photographs, comics, cartoons, and sports at one end and scandal, speeches, society, and advertisements at the other. The results show that illustrations and amusements appear to predominate among the reading interests of both high school and college students. Certain sex differences are indicated.—S. W. Fernberger (Pennsylvania).

2683. Ferguson, L. W. A study of the Likert technique of attitude scale construction. *J. soc. Psychol.*, 1941, 13, 51-57.—Results obtained with the Minnesota Scale for the Survey of Opinions, which was constructed by Likert's method, show that the Likert technique does not obviate the need for a judging group.—G. Brighouse (Occidental).

2684. Gomez Robleda, J. Ensayo biotipológico sobre los Indios Tarascos. (Biotypological examination of the Tarasco Indians.) In *Mendieta y Nunez, L., Los Tarascos; monografía histórica, etnográfica y económica*. México, D. F.: Imprenta Universitaria, 1940. Pp. 117-129.—The Tarascos are a people racially distinct from the other races indigenous to Mexico. This article is a summary of a more detailed work which the author has published regarding the biotypological study of this tribe. These people were studied with respect to the following attributes: body type, physiological, endocrinological, mental, and social status. With respect to bodily build they tend to be lean with the longitudinal measurements exceeding the transverse. Their physiological type tends towards the vagotonic. Endocrinologically they are primarily hypo-suprarenal in disposition. Mentally they tend towards an introverted and schizoid temperament. As a group, they are intellectually and socially retarded which is attributed by the author to poor environ-

ment. Those Tarascos who measured higher in vital index tended to be brighter, the correlation between intelligence and this measure of physical capacity being +.66.—J. W. Nagge (Emporia State).

2685. Gosnell, H. F., & Pearson, N. M. Relation of economic and social conditions to voting behavior in Iowa, 1924-1936. *J. soc. Psychol.*, 1941, 13, 15-35.—Those Iowa counties which suffered most from the drought shifted most decidedly away from Roosevelt in 1936, but "the nature and extent of the shift was conditioned by the traditional non-economic attitudes toward the major parties." The southern counties, which gave Roosevelt the least support, were the poorest economically and the driest; they had the most native whites, the largest proportion of older voters, the fewest big cities, the most rapidly declining population, and the smallest number of tenants and farm-laborers. Opposite conditions and trends hold true for the Cash Grain Area which gave Roosevelt the strongest support.—G. Brighouse (Occidental).

2686. Gregory, W. S. A study of stereotyped thinking: affective reactions to persons as the basis for judging their nationality. *J. soc. Psychol.*, 1941, 13, 89-102.—50 college students rated 15 nationalities on a 9-point favorableness-unfavorableness scale. A month later they rated 16 photographs (which unknown to them represented the 15 nationalities including 2 Germans) on a similar scale. Another month later they attempted to identify the nationalities of the 16 photographs. The rank order of ratings on favorableness-unfavorableness (in February 1939) was American, English, Dutch, Danish, French, Norwegian, Australian and Finnish, Belgian, German, Spanish and Austrian, Polish, Russian, Italian. The subjects were not able to identify the actual nationality of the photographs above chance expectation. There was an r of $+.806 \pm .058$ between direct affective ratings of each photo and the indirect ratings, derived by finding the affective rating the subject had given to the nationality to which he assigned the photograph. This indicates that "a functional relationship must have occurred between affect towards the photographed persons and affect towards the nationality names in the process of attempting to identify the nationalities of the photographs."—G. Brighouse (Occidental).

2687. Groves, E. R. Bibliography; books and pamphlets of interest to teachers and specialists in the field of marriage and the family. *Social Forces*, 1940, 19, 236-243.—"In addition to the brief annotation—except when the title makes this unnecessary—describing the nature of each book, a statement is included concerning the purpose for which the book or the pamphlet seems best adapted." 150 titles are listed, all published during 1939 and 1940.—H. L. Ansbacher (Brown).

2688. Hart, H. N., & Hart, E. B. Personality and the family. (Rev. ed.) Boston: Heath, 1941. Pp. 531. \$3.25.—See IX: 4706.

2689. **Henrikson, E. H.** The relation among knowing a person, liking a person, and judging him as a speaker. *Speech Monogr.*, 1940, 7, 22-25.—179 college students rated student speakers on 5-point rating scales to indicate (1) how well they knew the speaker, (2) how well they liked the speaker, and (3) how good a speaker they thought him to be. The coefficients of contingency between these items indicate that the better known students were liked better, and were also judged to be somewhat better speakers. The better liked students were judged to be better speakers. Closer analysis of degree of acquaintance and rating as a speaker showed that those known only in class were somewhat better liked and judged to be slightly better speakers than those who were well known to the raters.—*W. H. Wilke* (New York University).

2690. **Jacobsen, O. I.** Harmonic blending in the natural versus the tempered scale. *J. Musicol.*, 1941, 2, 126-129.—Those working in the psychology of music will find in this article tables giving the divergencies between the natural and tempered scales for all notes in both major and minor keys.—*P. R. Farnsworth* (Stanford).

2691. **Joussain, A.** Psychologie des masses: rapport de l'individu à la foule. (Mass psychology: the relation of the individual to the crowd.) *Rev. int. Sociol.*, 1938, 36, 151-162.—[Abstracted review; original not seen.] The individual enters the crowd situation with an innate character and an acquired nature. The crowd divests him of that part of his personality that is contrary to its feelings and to that extent diminishes his personality; that part of his personality which is in accord with the crowd is strengthened. Two possible consequences are: (1) lowering the superior individuals to the crowd's level or (2) elevating the masses. Two types of individuals not likely to be dominated by the crowd are (1) the isolated thinker or artist and (2) the domineering would-be leader. The behavior evoked in the individual by the crowd could be brought forth in the isolated individual under the proper conditions. The consciousness of thinking and feeling as part of a crowd brings about action by strengthening already latent impulses and by providing direction for their outlet.—*D. L. Glick* (Brown).

2692. **Karlin, J. E.** Music ability. *Psychometrika*, 1941, 6, 61-65.—Two batteries of music tests were factored by the centroid method. From each battery 3 oblique factors were extracted and in each case were tentatively identified as tonal sensitivity, retentivity (memory for elements), and memory for form. The correlations of the music tests of one battery with subtests of Cattell's intelligence test and with tests of a literary nature are also reported.—(Courtesy *Psychometrika*).

2693. **Katz, D.** The public opinion polls and the 1940 election. *Publ. Opin. Quart.*, 1941, 5, 52-78.—The author discusses and compares the methods and results of the Gallup, Fortune, and Crossley polls on the 1940 presidential election. These polls agreed in predicting a close election, a Roosevelt

victory, and in underestimating Democratic strength. For the error of underestimating Democratic strength a number of possible sources are considered and discussed. Katz concludes: (1) While the 1940 polls erred in estimating the closeness of the election due to underestimating Democratic strength, their predictive performance compares favorably with measurement in the social sciences. (2) The constant error in the polls can be attributed to (a) a failure to represent properly the lower income group, (b) attempts to correct for last minute changes in opinion. (3) The interview is again shown to be superior to the mail ballot. (4) The method of predicting voting behavior from remote secondary factors has yet to prove itself. (5) For the purpose of election prediction the Gallup method seems superior to the Fortune method. (6) The 1940 polls seem to indicate that less tinkering with original data yields a greater chance of accurate prediction.—*K. B. Breland* (Minnesota).

2694. **Kelly, E. L.** Marital compatibility as related to personality traits of husbands and wives as rated by self and spouse. *J. soc. Psychol.*, 1941, 13, 193-198.—A high degree of marital compatibility is associated with a tendency to rate oneself above average on most personality traits, and to rate the spouse still higher than oneself.—*G. Brighouse* (Occidental).

2695. **Knowler, F. H.** Graduate theses—an index of graduate work in the field of speech. VI. *Speech Monogr.*, 1940, 7, 1-21.—This is a list of 386 theses, mostly granted in 1939, indexed by topic and by institution. Of psychological interest are studies relating to audience psychology, speech and personality, experimental phonetics, speech defects, and radio speaking.—*W. H. Wilke* (New York University).

2696. **Komarovsky, M.** The unemployed man and his family; the effect of unemployment upon the status of the man in fifty-nine families. New York: Dryden Press, 1940. Pp. xii + 163. \$1.75.—This is a study of the relation between the man's role as an economic provider of the family and his authority in the family, undertaken by the Institute of Social Research in a large industrial city just outside New York City. 59 homogeneous relief families were interviewed during the winter of 1935-36 with the following results: (1) unemployment lowered the status of the husband in 13 out of 58 families; (2) "unemployment does not so much change the sentiments of the wife toward the husband, as it makes explicit the unsatisfactory sentiments that already existed prior to the 'depression';" (3) out of 57 cases, the man's personality showed deterioration in 22, no change in 24, improvement in 11; (4) loss of father's authority was in general a function of the child's age; (5) the men did not become radical and class conscious; (6) the social life of the husband and wife was markedly reduced; (7) 22 out of 38 families showed a decrease in frequency of sex relations.—*K. B. Breland* (Minnesota).

2697. Landis, C., Bolles, M., & D'Esopo, D. A. Psychological and physical concomitants of adjustment in marriage. *Hum. Biol.*, 1940, 12, 559-565.—There was no one-to-one relation between physical factors and mutual adjustment; $\frac{1}{3}$ of a group of 199 had poor sex adjustment. Companionship and mutual interests are important factors in good adjustment. Adolescent education is believed more important than re-education.—O. W. Richards (Spencer Lens Company).

2698. Lull, P. E. The effectiveness of humor in persuasive speech. *Speech Monogr.*, 1940, 7, 26-40.—4 speeches were prepared, one humorous and one non-humorous in favor of state medicine, and one of each type opposed to state medicine. The speeches on either side of the question, identical in arguments, arrangement, length, etc. were presented by the author and also by other speakers to 742 undergraduate students, whose reactions were compared with a group of 274 controls. 2 forms of a Thurstone-type attitude scale were used, and attitudes were measured 2 weeks before the speeches were given, immediately after the speeches, and 3 weeks after. Both, records by observers and ratings by the audience indicated a real difference in the amount of humor in the 2 types of speeches, no laughter being recorded for the non-humorous talks, whereas the humorous material provoked considerable laughter. Comparisons are based on groups which held approximately equivalent attitudes on the question of state medicine on the initial attitude tests. Both types of speech caused significant change of attitude in the intended direction. There was no significant difference between the humorous and the non-humorous speech, either in immediate effect on attitudes or on attitude changes after 3 weeks. Similarly, both types of speeches were judged about equally interesting and convincing by the listeners.—W. H. Wilke (New York University).

2699. Meier, N. C. Recent research in the psychology of art. *Yearb. nat. Soc. Stud. Educ.*, 1941, 40, 379-400.—Psychological research can help in formulating and clarifying fundamental art concepts. Nursery school children demonstrate that graphic activity begins with manipulative play. Creative imagination involves the presence of superior, accurate, and extensive perceptual experience; an emotional reinforcement of this experience; and an unusual intelligence in translating it into an artistic product. Progress in appreciation, which follows a "child's own effort to organize graphically his emotionally reinforced experience," is best assured when linked to his own interests and environment. Artistic capacity is a complex of 6 functions: manual skill; volitional perseveration; esthetic intelligence; perceptual facility; creative imagination; and esthetic judgment.—P. S. de Q. Cabot (Simmons).

2700. Mosier, C. I. A psychometric study of meaning. *J. soc. Psychol.*, 1941, 13, 123-140.—A list of 296 word-stimuli expressing judgments of favorableness or unfavorableness were checked on an

11-point scale of favorableness-unfavorableness by approximately 140 judges. Results confirmed the hypotheses "first, that the meaning of a word may be considered as if it consisted of two parts, one constant and representative of the usual meaning of the word, and one variable, representing individual interpretations in usage and associated context and general usage; second, that the frequency with which any particular meaning is evoked is describable by the Gaussian law." The study indicates that rational quantitative methods can be applied to problems of reading and language.—G. Brighthouse (Occidental).

2701. Older, H. J. Personal experiences underlying the formulation of attitudes of liberalism and conservatism. *Trans. Kans. Acad. Sci.*, 1940, 43, 345-347.—164 college students filled out a new liberalism-conservatism attitude scale. Results are interpreted as supporting the hypothesis that a "person's social attitudes are as much the product of local personal incidents as of the bias of his education."—W. A. Varvel (Chicago).

2702. Rashevsky, N. Note on the mathematical theory of interaction of social classes. *Psychometrika*, 1941, 6, 43-47.—In continuation of previous studies, the interreaction of two social classes is investigated from a somewhat different point of view. An exchange of results of activities of the two classes is considered, and a mathematical approach is outlined based on the use of such psychological concepts as the satisfaction function.—(Courtesy *Psychometrika*).

2703. Rawlins, F. I. G. The measurement of art. *Nature, Lond.*, 1940, 146, 292-294.—The writer attempts to synthesize Birkhoff's aesthetic measure (the ratio of order to complexity) and the Gestalt concept of psychological organization. It is concluded that, "for a given order, aesthetic value increases the lower the free energy density."—F. W. Finger (Brown).

2704. Roper, E. Checks to improve polling accuracy. *Publ. Opin. Quart.*, 1941, 5, 87-90.—The author explains how changes of opinion and reasons for the changes were measured in pre-election studies. Methods of checking final results and the use of an attitude scale to give gradations of opinion are discussed.—K. B. Breland (Minnesota).

2705. Rugg, D. Experiments in wording questions: II. *Publ. Opin. Quart.*, 1941, 5, 91-92.—A report of the second study done by the Princeton Public Opinion Research Projects on the effect of wording on poll responses. (See XIV: 6071.)—K. B. Breland (Minnesota).

2706. Sharp, W. R. Methods of opinion control in present-day Brazil. *Publ. Opin. Quart.*, 1941, 5, 3-16.—This is a study of official propaganda and censorship under the Vargas regime in Brazil, based on data collected by the author during a six-months sojourn in that country from March to August, 1940. The various divisions of the national organization for opinion control are described, and their functions and methods are discussed. Prognostica-

tions concerning the future course of Brazilian propaganda are ventured.—K. B. Breland (Minnesota).

2707. Stein, L. **The final cadence and our time.** *J. Musicol.*, 1941, 2, 133-141.—The thesis is developed that the feeling tone characterizing a particular period of history parallels the feeling tone expressed in the arts at that same period. Thus, in the days of absolute standards in ethics and politics, there was expressed an absolute finality in the final cadences in music. Later, as doubts concerning the eternal verities multiplied, atonality and complexity characterized the music of the period. Now there seems to be evident "a return from complexity to simplicity, from a harmonically indefinite to the definite."—P. R. Farnsworth (Stanford).

2708. Stites, R. S. **The arts and man.** New York: McGraw-Hill, 1940. Pp. xiii + 872. \$4.50.—This is an historically oriented survey of the fine arts with special reference to concomitant political, social, and philosophical backgrounds. Accompanying development of esthetic theory is briefly sketched. In the first chapter an analysis is made of art elements and design, with examples both from nature and the arts. The remaining 18 chapters are devoted to an interpretive discussion of representative works of architecture, sculpture, painting, music, literature, and drama, treated in parallel fashion, from prehistoric times to the present. Approximately half the chapters are on European art; the remainder concern principally Egyptian, Oriental, and American art. The interdependence of cultural styles is emphasized. Summary, selected bibliography, and musical recordings at end of each chapter. Charts, color plates, and over 600 black-white illustrations. Index.—J. T. Cowles (Illinois).

2709. T'an, Y. E. [The construction of a war attitude scale.] *J. Educ.* (Chinese), 1940, 30, No. 8, 1-15. Also *Monogr. Dep. Educ. Psychol., Sun Yat-sen Univ.*—Thurstone's method was followed. 56 attitude statements were finally selected and divided into 2 forms according to odd and even numbers. The scale thus constructed was administered to 228 students. A reliability coefficient of $.715 \pm .01$ and a validity coefficient of $.612 \pm .028$ were found. 65.3% of the subjects came near to approval of war. There was no marked sex difference, nor any relationship between the test scores and grade or age. Directions for administering the scale, scoring key, and the scale itself are appended.—C. F. Wu (Chengtu).

2710. Tchang, T. M. **L'écriture chinoise et le geste humain; essai sur la formation de l'écriture chinoise.** (Chinese script and human gesture; essay on the formation of Chinese script.) Shanghai: Librairie de T'ou-sé-wé, Zi-ka-wei, 1937. Pp. 205. \$8.00 Mex.—C. F. Wu (Chengtu).

2711. Thorndike, E. L. **144 smaller cities.** New York: Harcourt, Brace, 1940. Pp. 135. \$1.50.—This book is concerned with the goodness of life

in cities of 20,000 to 30,000 population in 1930. It evaluates cities on the basis of health, educational, economic, creature comfort, and other miscellaneous indices. Some means by which cities may improve themselves are appraised.—H. A. Gibbard (Brown).

2712. Tyler, I. K. **Intolerance by radio.** *Amer. Teacher*, 1940, 24, No. 5, 22-25.—5 types of radio material are cited which often promote racial intolerance. Some programs appeal to racial hatreds; a larger number merely spread current racial stereotypes. A few programs promote tolerance.—S. S. Sargent (Barnard).

2713. Weymouth, A. **A psychologist's war-time diary.** New York: Longmans, 1940. Pp. 300. \$3.50.—[Abstracted review; original not seen.] This account covers the first 5-months period of the present war. The greater part of the work deals with the activities of the British Broadcasting Company.—F. W. Finger (Brown).

2714. Willis, E. E. **The relative effectiveness of three forms of radio presentation in influencing attitudes.** *Speech Monogr.*, 1940, 7, 41-47.—The straight talk, the complete dramatization, and the combined talk and dramatization were compared for effectiveness in producing attitude changes on groups of XIth and XIIth grade high school and college students, totalling 753 persons. The 3 types of program were judged to be about equal in quality, and were presented to the listeners in recorded form. The dramatization was most effective, and the combined form least effective, in influencing the high school students; the 3 forms were equally effective in influencing college students. The combined form was preferred by a large majority of the high school students, and the dramatization rated second in their preferences. The majority of the college students also indicated a preference for the combined form.—W. H. Wilke (New York University).

2715. Zeleny, L. D. **Experiments in leadership training.** *J. educ. Sociol.*, 1941, 14, 310-313.—An experimental study of training and leadership is reviewed and commented upon in light of the reports of persistence of leadership in individuals. It is concluded that "leadership ability can be developed by instruction and practice in leadership." However, "practice must be done in groups of a character similar to real-life groups."—D. G. Ryans (Cooperative Test Service).

2716. Zipf, G. K. **National unity and disunity; the nation as a bio-social organism.** Bloomington: Principia Press, 1941. Pp. xv + 408. \$3.50.—This is a report of an objective-factual approach to an analysis of social phenomena which resulted in the discovery of certain simple but precise laws expressed in mathematical terms. A nation is considered as an evolving bio-social entity the organization of which is governed by certain forces each of which is examined in turn. When Nature's equilibrium of social-economic forces, designed for the conservation of the energy of the human race, is disturbed, international antagonisms and wars

result. An analysis of past and present data from different nationalities suggests interpretations of the causes of economic and cultural conflicts.—*P. S. de Q. Cabot* (Simmons).

[See also abstracts 2583, 2594, 2611, 2636, 2655, 2661, 2722, 2776, 2791, 2860.]

CRIME AND DELINQUENCY

2717. **Children's Bureau, U. S. Department of Labor.** Directory of state, county, and municipal training schools caring for delinquent children in the United States. *U. S. Child. Bur. Publ.*, 1940, No. 264. Pp. 25.

2718. **Gardner, G. E., & Wollan, K. I.** Activity-interview in the study of delinquency. *Amer. J. Orthopsychiat.*, 1941, 11, 143-150.—An attempt to expand and verify the information gained in psychiatric interviews has been made in the Citizenship Training Department of the Boston Juvenile Court. Delinquents are referred to this group by the Juvenile Court and here participate in a three-fold program: (1) the boy is seen in interview at least once a week and encouraged to talk over his problems, (2) he participates daily in games and exercises in the gymnasium with his fellows, (3) he attends free-for-all classroom discussions of problems pertinent to a boy's life in the highly congested sections of a large city. These informal and non-artificial activities give an observational check on impressions previously gained from the case history and the boy's own verbal production.—*R. E. Perl* (Jewish Board of Guardians).

2719. **Healy, W.** The program of the American Law Institute for dealing with youthful offenders. *Amer. J. Orthopsychiat.*, 1941, 11, 175-177.—This paper describes "A Youth Correction Authority Act" of the American Law Institute, a model enactment providing that all persons of the youth group convicted of criminal offense shall be turned over to the Authority, which shall determine matters of probation, institutional segregation and treatment, and parole. The types of correctional training and treatment are to be widely diversified, as suited to the needs of the individual.—*R. E. Perl* (Jewish Board of Guardians).

2720. **Hirschberg, M.** Pathology of criminal justice: innocent convicted in three murder cases. *J. crim. Law Criminol.*, 1941, 31, 536-550.—The author analyzes 3 cases of false convictions for murder, in order to determine the psychological processes involved in judicial errors. The falsity of the convictions is based on subsequent court decisions reversing former decisions. In the first case testimony was accepted by the court which identified the accused shortly before the murder despite dimness of light and distance of the observers which made certain recognition impossible. In the 2 other cases conviction resulted in part because of prejudice arising from false statements of the accused and because of misinformation given by expert witnesses. The errors could have been

avoided by following all possibilities of accounting for the events instead of allowing a single possibility to obscure all others and by using scientific techniques to control and substantiate the testimony of witnesses.—*L. M. Hanks, Jr.* (Illinois).

2721. **Landecker, W. S.** Criminology in Germany. *J. crim. Law Criminol.*, 1941, 31, 551-575.—The author reviews typical contributions to criminology in Germany under 6 headings. (1) Theories of the purpose of punishment are given from Kant to the National Socialistic retributive concept. (2) As legalistic approaches typological theories of Sauer and Exner differentiate varying crimes according to discrete causal factors. (3) The anthropological approach, inspired chiefly by Kretschmer, has sought to correlate types of crime with body build. (4) Psychoanalysis, as a psychological approach, has emphasized unconscious motivation of repressed libido, while Individual Psychology stresses compensation for inferiority feelings. (5) German sociology of crime has been influenced largely by American research, though von Liszt has distinguished theoretically between criminal sociology and psychology. (6) Criminal biology has studied chiefly the inheritance of criminality by studying convictions in families and the association of criminal acts in twins.—*L. M. Hanks, Jr.* (Illinois).

2722. **Lander, J.** Traumatic factors in the background of 116 delinquent boys. *Amer. J. Orthopsychiat.*, 1941, 11, 150-157.—Working with delinquent boys at the Hawthorne-Cedar-Knowlles School of the Jewish Board of Guardians the author was impressed by the frequency of parental shortcomings. In investigating problems such as parental rejection, parental incompatibility, parental instability, and defective parental social adjustment he found that 99 of the 116 boys in the total series had suffered from one or more of these traumatic factors. He feels that neither case work nor psychiatric treatment could have altered these parents to a degree which would permit the children to develop in a normal environment. Neither foster homes available today nor institutionalization is the solution. A possible solution might be the elaboration of kindergarten and pre-kindergarten schools so set up as to offer the children exposure to new attitudes and ideals. The teacher or supplementary parent who gives the child a sense of emotional warmth and security will have little difficulty in also giving him a conscience.—*R. E. Perl* (Jewish Board of Guardians).

2723. **Lindesmith, A. R.** The drug addict: patient or criminal. *J. crim. Law Criminol.*, 1941, 31, 531-535.—The author replies to an article of Twain Michelsen (see XV: 1911) who advocates more rigorous legal control of drugs as the solution to the drug addiction problem. The author quotes a police authority who states that drug addiction is a medical and not a criminal problem, cites the success of the English practice of licensing constant quantities of drugs to certified addicts, indicates that in Formosa such licensing along with making drugs

inaccessible to non-addicts has reduced the number of addicts by 80%, and asserts that the harmfulness of drugs is not in question though he believes many of the harmful effects to be products of the repressive measures.—*L. M. Hanks, Jr.* (Illinois).

2724. **Orgel, S. Z.** Identification as a socializing and therapeutic force. *Amer. J. Orthopsychiat.*, 1941, 11, 118-126.—The deviation of the delinquent or criminal from normal is a matter of development, depending more on life history than on heredity. The development of the ego and especially of the super-ego are problems of identification. This process of identification is the crux of the assimilability of problem children within a normal group in an institution. No detrimental influence on normal children from contact with deviants was found, whereas a salutary influence is exerted on the maladjusted child from his close association with the normal group.—*R. E. Perl* (Jewish Board of Guardians).

2725. **Rosanoff, A. J., Handy, L. M., & Plesset, I. R.** The etiology of child behavior difficulties, juvenile delinquency and adult criminality, with special reference to their occurrence in twins. *Psychiat. Monogr.*, 1941, No. 1. Pp. 187.—In this study of 409 pairs of twins who were selected on the basis of the existence of child behavior difficulties, juvenile delinquency, or adult criminality in one or both of the twins in each pair, detailed analysis of the data yielded strong evidence that cerebral birth trauma is an important etiologic factor in the behavior abnormalities under discussion. It does so by impairing or destroying inhibitory brain mechanisms whose function is that of controlling behavior. The factors of heredity and sex, also, were found to be highly important etiologically. These determine an undue vulnerability of the brain tissues thus greatly increasing the hazard of cerebral birth trauma. Among exogenous, environmental, or precipitating factors the most outstanding are those of toxic and of social or economic nature. These, however, are quasi-etiological factors for they appear as occasions, rather than causes, of antisocial behavior. Brief clinical summaries of the 409 pairs of twins of monozygotic and dizygotic types are presented.—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

2726. **Schiff, P.** Psychologie et criminologie. (Psychology and criminology.) In *Various, Mélanges Pierre Janet*. Paris: Editions d'Artrey, 1939. Pp. 231-241.—Psychological analysis is a far better approach to the criminal mind than all other methods hitherto used. In the psychiatric clinic of one of the Paris prisons for women, where he sees yearly 800 to 900 cases, the author gives intelligence, character, and morality tests of which the last 2 are not standardized. Observations of the culprits' behavior and their autobiographic writings are also considered. The most efficient methods of analysis are interview and free conversation, in the practice of which the approaches of Janet, Freud, and Adler proved equally useful. Of 100 culprits 5 were psychotic, 12 mentally unbalanced, and 7 seemed to have

acted for motives of self-punishment, while 76 seemed normal. Medico-legal clinics modeled after the existing psychiatric clinics are needed to study premeditation, deliberation, decision, and execution in the criminal act, its general laws and individual differences.—*C. Nony* (Sorbonne).

INDUSTRIAL AND PERSONNEL PROBLEMS

2727. [Anon.] War-time street lighting and aids to movement in street. *Brit. J. Ophthalmol.*, 1941, 25, 125-130. Also *Light & Lighting*, 1940, December.—This is a summary of the report on fundamental requirements, underlying war-time street lighting prepared for the Joint Committee of the Ministry of Home Security and the Illuminating Engineering Society. The study is devoted to vision at the level of illumination of a clear moonless night which is of the same order as that furnished by war-time street lighting (0.0002 ft. c.). The characteristics of visual sensitivity at low levels of illumination are discussed with reference to state of adaptation, size of object, importance of contrast, color, and application of illumination (local and general) with respect to limits to brightness. Recommendations are given. "Experience seems to have proved the fundamental value of a uniform level of illumination with, so far as possible, no regions of complete darkness. . . . It would, however, add to amenities in the streets if somewhat higher illuminations, under proper control, or suitably screened, could be adopted locally in certain instances."—*R. J. Beitel, Jr.* (American Optical Company).

2728. [Anon.] Hours of work and efficiency. *Nature, Lond.*, 1940, 146, 108-110.—It was clearly established, during the last war and in the inter-war period, that an increase in working hours did not proportionately increase output. Because of the difficulty of measuring the efficiency of men in supervisory or research positions, the relations here have not as clearly been shown. Further, for the sake of maintaining morale it has been considered to be a questionable policy to treat these men differently from the manual workers. It is pointed out, however, that the dangers of increased pressure, whether imposed from outside or by the individual himself, are even greater in the case of the intellectual worker than in the case of the physical laborer.—*F. W. Finger* (Brown).

2729. **Bills, M. A.** Trends in selection for employment. *Personnel*, 1939, 15, 184-193.—The author discusses the uses of tests, the application blank, the interview, and references as means of predicting future success at the time of employment. The general trend appears toward the pooling of resources for long time programs which will yield results that are more universally usable.—*A. M. Kershner* (Maryland).

2730. **Britt, S. H.** Pending developments in the legal status of psychologists. *J. consult. Psychol.*, 1941, 5, 52-55.—This is a résumé of what factual information is available throughout U. S. A. concern-

ing the attempts to obtain legal recognition for psychologists, especially those working in the applied field. 4 criteria are given which should be satisfied before any group can be regarded as "professional." In 37 states and the District of Columbia there is no plan for changing the legal status of psychologists; a brief outline of the situation in each of the remaining states is given. In only 2 states, Kansas and Illinois, is there any immediate likelihood of actual steps being taken for the certification of psychologists. Many psychologists believe in the desirability of certification but consider that legislation is at present premature.—*P. S. de Q. Cabot* (Simmons).

2731. **Burk, S. L. H.** A case history in salary and wage administration. *Personnel*, 1939, 15, 93-129.—Procedures of job analysis, job description, job ranking, job rating, and determining wage gradations in the Atlantic Refining Company are described. 9 exhibits are provided.—*A. M. Kershner* (Maryland).

2732. **Burling, T.** The role of the professionally trained mental hygienist in business. *Amer. J. Orthopsychiat.*, 1941, 11, 48-56.—Mental hygienists have a body of knowledge about behavior which should be very useful to executives. Mental hygienists can help in diagnosis, in teaching interviewing techniques, in individual psychotherapy, in working indirectly through the supervisor, in doing professional personnel work, and, above all, in educating executives in the principles of handling people and in giving the individual executive the reorganization of personality necessary if he is to be enabled to behave in accordance with these principles.—*R. E. Perl* (Jewish Board of Guardians).

2733. **Carlson, W. A.** Aviation and its medical problems. *Army med. Bull.*, 1940, No. 53, 11-20.—First the hazards peculiar to aviation industry are discussed; the poisoning by ethylfluid and by CO. More attention, however, is paid to the influences of changing atmospheric pressure upon the body. A frequent condition in aviators is otitis media, a traumatic inflammation. The danger of this condition develops during rapid descent or ascent, when the flyer has no time or is unable (because of unconsciousness) to ventilate the eustachian tube. Another condition is the aero-deafness; as yet not sufficiently studied. The third problem is the airsickness, which sometimes develops also in perfectly smooth and level flight and may persist for days after landing. Neither methods of prevention nor of successful treatment are known so far. Unsolved is also how to cope with the effect of cold and wind. A peculiar and difficult problem is connected with lack of O₂ in altitudes over 12,000 feet. The first symptoms are impaired attention and euphoria. Therefore, the pilots are unaware of any danger and of fatigue, and run the risk of unconsciousness. Finally it is pointed out that the testing of future pilots has still to overcome some difficulties, since no tests are available for nightblindness and for psychological fitness.—(Courtesy *Biol. Abstr.*).

2734. **Carmichael, L.** The national roster of scientific and specialized personnel: a progress report. *Science*, 1941, 93, 217-219.—*F. A. Mole, Jr.* (Connecticut).

2735. **Chao, M. H.** [How to select good aviators psychologically.] *China's Air Force*, 1939, No. 21, 17-19.—Psychology applied to aviation has a 3-fold purpose: selection and classification of aviation personnel and examination of the aviator before flight. A good aviator must have good discriminating power, good memory and association, normal speed of learning and habit-formation, power of concentration, and normal emotional reactions. Fitness of the aviator before flight is important on account of the general strain and the effects of lack of oxygen.—*C. F. Wu* (Chengtu).

2736. **Cooper, A. M.** How to supervise people. New York: McGraw-Hill, 1941. Pp. 157. \$1.75.—A practical handbook explaining how executives and foremen may analyze their jobs and apply correct methods in handling their daily problems in supervision.—(Courtesy *Publishers' Weekly*).

2737. **Cornell, E. L.** Certification of specialized groups of psychologists. *J. consult. Psychol.*, 1941, 5, 62-65.—The writer lists the professional courses required in the preparation of school psychologists in New York State. At present New York "has no professional licensing of psychologists but it does have certification of school psychologists, as does Pennsylvania." Chief controversy centers on the breadth of training required. It is suggested that the wisest course to follow is to work toward any kind of special certification that is feasible within a state or organization, provided practices and standards are raised to an optimum.—*P. S. de Q. Cabot* (Simmons).

2738. **Decker, D. D.** A practical supervisory training program. *Personnel*, 1939, 16, 62-68.—Experience in occupations throughout all departments of the plant of the Wolverine Tube Company is the basis of a training program which incorporates meetings, study courses, conferences, consultations, guidance in reading, and trips to other companies.—*A. M. Kershner* (Maryland).

2739. **Decker, D. D., & Klopsch, O. Z.** A program for stimulating employee thinking and effectiveness. *Personnel*, 1939, 16, 16-25.—It is management's responsibility to explain to employees the problems which confront it. Daily meetings with small groups explaining the division of the company's sales dollar, general business conditions, conditions within the particular business in conjunction with "Why" contests and an employee rating plan have been of considerable assistance to the Wolverine Tube Company.—*A. M. Kershner* (Maryland).

2740. **Diringshofen, H. v.** *Medizinischer Leitfaden für fliegende Besatzungen.* (Medical principles for airplane crews.) Dresden-Leipzig: Steinkopff, 1939. Pp. 204. RM 3.—[Abstracted review; original not seen.] This is a textbook for squadron leaders and personnel workers. The author stresses

the extraordinary, often decisive, influence of nervous and mental factors in aviation. The aviation physician is shown to have important functions as friend, comrade, and judge of human nature. Some aviation experience is a great help for these psychological activities. The neglect of psychology in the medical course is deplored, although the biologically trained physician is more competent to cope with the involved technical-biological problems than is the theoretical psychologist.—*M. E. Morse* (Baltimore, Md.).

2741. **Evans, J. J., Jr.** Information, please. *Personnel*, 1939, 16, 25-31.—If the questionnaire is to be successfully used, there should be a definite and useful purpose, employee conviction of management's sincerity, words of few syllables and questions devoid of ambiguity, preservation of employee anonymity, and a report of the findings to the employees. Experience with the questionnaire has led to the development of a program for increased personal contact in the Armstrong Cork Company.—*A. M. Kershner* (Maryland).

2742. **Fryer, D.** Introduction: contributions of certification to unified professional status in psychology. *J. consult. Psychol.*, 1941, 5, 49-51.—This is a survey of the viewpoints of proponents of legal certification and self-certification by professional bodies presented on the subsequent pages. The program of self-certification now under way by the N. Y. State Association for Applied Psychology is outlined.—*P. S. de Q. Cabot* (Simmons).

2743. **Fuchs, E. F., & Tinkelman, S.** Physical skill and intellectual capacity. *Publ. Person. Quart.*, N. Y. C., 1941, 2, 63-65.—It was found that of approximately 85,000 adults applying for a sanitation position requiring both mental and physical abilities, there was no relationship between physical test and mental test marks. There is no necessary compatibility or incompatibility between the possession of brains and brawn.—*H. Hausheer* (Taylor).

2744. **Giberson, L. G.** Emotional first-aid stations. *Personnel*, 1939, 16, 1-15.—The industrial psychiatrist is valuable in reconciling the efficient functioning of the employee group with the emotional needs of the individual. Neuropsychiatric service may assist the personnel man to be alert for the 5 psychiatrically most crucial stages through which the employee must travel: (1) the crisis of beginnings, (2) the 5 year peak, (3) the 30 year crisis, (4) the menopause, and (5) the crisis of conclusions.—*A. M. Kershner* (Maryland).

2745. **Harrell, W.** Testing the abilities of textile workers. *St. Engng Exp. Stat. Bull.*, Georgia, 1940, 2, No. 2. Pp. 14.—The requirements were analyzed for machine fixing, supervising, weaving, and operating sewing machines. A different test battery was administered for each job. Test scores were correlated with production records or superiors' ratings. "Usable correlations were found in tests for supervisors, in tests predicting the bad work of weavers, and in tests predicting success in certain sewing machine operations. There were negative results

in the tests of weavers' production and in the tests of machine fixing. . . . Mechanical aptitude is shown to consist principally in the ability to visualize the relations of objects in space, and only to a negligible extent in finger ability."—*F. W. Finger* (Brown).

2746. **Harrell, W., & Faubion, R.** Primary mental abilities and aviation maintenance courses. *Educ. psychol. Measmt.*, 1941, 1, 59-66.—This is a report of the 3rd of a series of investigations "designed to determine the optimal pattern of abilities for mechanical work." Mechanical ability does not depend on any single separate factor. Several factors are present: perceptual, verbal, spatial, reasoning, and a knowledge of mechanical processes. In routine jobs where objects are manipulated, a manual agility factor is present. The results of this inquiry will be adopted in the testing program of the Air Corps Technical Schools.—*P. S. de Q. Cabot* (Simmons).

2747. **Ibarrola, R.** Instituto Nacional de Psicotecnica, curso 1939-1940. (National Institute of Psychotechnics, progress 1939-1940.) *Psicotecnica*, 1940, 1, 161-167.—The organization of the Institute which is supported by the Department of Education is described. Among its accomplishments are: the publication of the journal, assembly of a library, and professional services to engineers. For the first time, the Institute has functioned in the personnel selection for motorized corps of the army, assisted with work on optical precision instruments, and rendered services to schools of aviation and the military academy for infantry, artillery, and engineers. It has also assisted with reorientation of disabled soldiers and with orphaned children.—*J. E. Bader* (Brandon State School).

2748. **Kempton, E. W.** Orienting the college graduate in industry. *Personnel*, 1939, 16, 31-39.—Advantages and disadvantages of methods of job induction by (1) assignment to a regular job, (2) directed work experience, and (3) the study-observation plan are discussed. The author favors the second and suggests that college personnel men should learn more about these methods.—*A. M. Kershner* (Maryland).

2749. **Landis, C.** Certification of psychologists by the state as contrasted to certification by psychological organizations. *J. consult. Psychol.*, 1941, 5, 56-58.—The writer considers the limitations of both methods of certification and suggests that before legislation is advocated psychologists should clear up "their own thinking as to whether they are more interested in standards or in prevention of fraud." Psychologists should have a common basis of agreement regarding standards, competence, and responsibilities. A systematic plan of action is urged for the next 5 years.—*P. S. de Q. Cabot* (Simmons).

2750. **Lauer, A. R., & Silver, E. H.** Survey of research on night driving in relation to vision. *Optom. Wkly*, 1941, 32, 91-95.—This is a description of special equipment designed to investigate

problems of night driving, including efficiency of scotopic vision, contrast ratios, light tolerance, headlights, acuity in smoke, rain, etc. A short summary of experimental results to be published in full in a monograph is given.—D. J. Shaad (Detroit, Mich.).

2751. Mata, L. **La psicronometría en exámenes para aviadores.** (The psychochronometer in examinations for aviators.) *Rev. Sanid. milit., B. Aires*, 1938, 37, 216-232.—Evidence is presented to show the importance of the psychochronometer when used as one of the implements for laboratory examination of aviators. It measures time to the one-thousandth of a second and can be used in several tests for vision, attention, and memory. A table is presented to show reports of investigators on this equipment.—N. Downs (U. S. Employment Service).

2752. McMurry, R. N. **A scientific procedure for the selection of salesmen.** *Personnel*, 1939, 15, 165-183.—Analysis of personal history and personality test items tried out on salesmen of an unnamed company yielded 10 significant personal history items and 68 significant personality items. From a clinical field study of 250 men a standardized interview was developed. As a result of two validation studies it is claimed that the application form in combination with the personality test items eliminated 22.4% of the mediocre men and 31.8% of the failures with a loss of only 6.7% of the successful men.—A. M. Kershner (Maryland).

2753. Mozes, E. B., & Katonak, L. J. **One hundred drunken drivers.** *Ohio St. med. J.*, 1941, 37, 21-24.—[Abstracted review; original not seen.] Results of breath tests on the Harger Drunkometer for 100 male drunken drivers arrested in Canton, and urine tests for 24 of these, are reported. The authors believe that chemical tests are much more reliable as an index of the degree of alcoholic influence than even the most careful and detailed clinical study.—W. L. Wilkins (Milwaukee, Wis.).

2754. O'Rourke, L. J. **Standards for psychologists in civil service.** *J. consult. Psychol.*, 1941, 5, 59-61.—The entrance requirements for psychologists in the United States Civil Service are discussed in detail, with reference to each grade of classification. "Experience, its quality, extent, and recency, is weighted more heavily in the examinations for higher grades than in those for the lower grades." The work of civil service recruiting agencies will be simplified when the psychological profession agrees upon minimum educational requirements and standards and is successful in having them ratified by legislative action.—P. S. de Q. Cabot (Simmons).

2755. Powell, N. J. **Steps in written test construction.** *Publ. Person. Quart., N. Y. C.*, 1941, 2, 73-76.—The author presents a stepwise analytical listing of the items of methods utilized in written test construction: the determination of the abilities to be measured, the determination of the test content, the allocation of emphasis, the preparation of the items, the arrangement and editing of the test

items, the experimental try-out, the final test copy, and general considerations in regard to test preparation integrity.—H. Hausheer (Taylor).

2756. Saffir, M. A. **Practical issues in the enactment of legislation for certification of psychologists.** *J. consult. Psychol.*, 1941, 5, 70-73.—On the basis of the experience of the Illinois Society of Consulting Psychologists practical suggestions are made for the benefit of other groups according to the following headings: preparing the legislation; introducing the legislation; and securing support for the legislation. Arguments against the Illinois bill are listed as examples of what might be objections raised elsewhere.—P. S. de Q. Cabot (Simmons).

2757. Selling, L. S. **Standards of training and experience in terms of job specifications as a basis of certification.** *J. consult. Psychol.*, 1941, 5, 66-69.—Particular reference is made to the qualifications of psychologists in the Clinic of the Recorder's Court in Detroit. In certain instances where the equivalence of a Ph.D. degree is accepted as a part qualification, the difficulties of clearly formulating this requirement are great. No matter what academic training is demanded, some psychologists are never able to develop to a high degree a desirable clinical sense comparable to that in clinical medicine. Psychologists should not be too "dogmatic about setting up experiential requirements for certification."—P. S. de Q. Cabot (Simmons).

2758. Selling, L. S. **A neuropsychiatric study of traffic offenders.** *Psychosom. Med.*, 1940, 2, 384-397.—This is a report of the results of an analysis of 100 cases of traffic offenders referred to the Psychopathic Clinic of the Recorder's Court in Detroit. Psychiatric (including neurological) and physical examinations were made, and other data were supplied from the health, symptomatic, social, economic, and educational history. Some conclusions are: (1) There was a considerable distribution of neurological findings. (2) A very definite relationship exists between psychiatric deviations and major violations. (3) Feeble-mindedness cannot be ignored. (4) The young driver is not necessarily the most dangerous. (5) Further serious consideration of the significance of neurological and psychiatric deviations in the personalities of traffic violators is imperative.—P. S. de Q. Cabot (Simmons).

2759. Shartle, C. L. **New defense techniques.** *Occupations*, 1941, 19, 403-408.—This is a report of the activities of the Occupational Analysis Section in providing the Army, Navy, local draft boards, and defense industries with personnel techniques needed to meet the situations produced by the Selective Service Act. Job analyses of civilian and service jobs, conversion codes showing the relation between civilian and service jobs, trade questions, grouping of families of related jobs, aptitude tests, and training in the use of the *Dictionary of occupational titles*, have been developed and provided.—G. S. Speer (Central YMCA College).

2760. Sheppard, E. H. **Let comments tell the story.** *Occupations*, 1941, 19, 445-446.—The writer

presents a list of specific, vividly descriptive words which would be helpful in accurately describing an applicant, in place of meaningless generalities.—G. S. *Speer* (Central YMCA College).

2761. *Smith, E. D.* Market sampling. *J. Marketing*, 1939, 4, 45-50.—Sampling tables at the 1 and 5% levels of significance are presented. These can be used to determine: (1) the accuracy of results to be expected from a proposed market research investigation, or the accuracy of results already secured; (2) the sample size or number of interviews required for investigations of a certain accuracy or error and given response or consumer preference; (3) the most economic sample size for certain results based on a preliminary market survey; (4) whether there is a real difference between several unlimited consumer choices; (5) the validity of differences between choices when selection is limited; and (6) the secular differences in consumer preference for temporal market studies. Examples of each are given.—A. M. *Kershner* (Maryland).

2762. [Various]. *Résumé of Washington round table on certification of psychologists.* *J. consult. Psychol.*, 1941, 5, 74-77.—P. S. de Q. *Cabot* (Simmons).

2763. *Villar, M.* Selección de los soldadores al arco eléctrico. (Selection of electric arc solderers.) *Psicotecnia*, 1940, 1, 220-227.—Selection of solderers should be based on fundamental requirements for the work: perfect stereoscopic vision, perfect visual acuity, good achromatic vision, manual control, normal intelligence, and pride and esthetic pleasure in the work. Brief description of testing apparatus and techniques is given: visual tests are made on known instruments, intelligence is determined by the Otis or Alpha tests, and mechanical ability by the Decroly test. Satisfactory correlation between work success and test performance was found.—J. E. *Bader* (Brandon State School).

2764. *Watson, G., & Seidman, J. M.* Dissatisfactions in work. *J. soc. Psychol.*, 1941, 13, 183-186.—The answers of 132 young men to the question "If you feel that you were not entirely successful on some of the jobs held, to what do you attribute that fact?" showed the following stated reasons (in order of decreasing frequency): the nature of the job; personality of the subject; lack of education or skill; work conditions; no opportunity for promotion; monotony; insufficient salary; long hours.—G. *Brighouse* (Occidental).

[See also abstracts 2463, 2500, 2512, 2552, 2777, 2793, 2807, 2810.]

EDUCATIONAL PSYCHOLOGY

(incl. Vocational guidance)

2765. *Ai, W.* [Directions for educational tests in elementary schools.] Shanghai: Chung Hwa Book Co., 1939. Pp. vi + 21. \$.10 Mex.—This pamphlet gives the administering and scoring procedures of the following elementary school tests: silent reading (Chinese, lower, middle, and higher

sections, 10 forms); arithmetic (4 forms); information (3 forms, 80 questions each); history (2 forms, 100 questions each); geography (2 forms, 100 questions each); social study (2 forms parts A and B, 100 questions each); and science (3 forms, 100 questions each). Multiple choice technique (4 alternatives) has been adopted. The scope of application of each form is indicated. Norms (grades I-VI) for each test have been derived from the test results of 492-1831 elementary school pupils in 8 districts including Nanking, Shanghai, Hangchow, etc. An example for the statistical treatment of the scores is given.—C. F. *Wu* (Chengtu).

2766. *Ai, W., & Fan, P. S.* [On the construction of an elementary school arithmetic test.] *Stud. Educ. Psychol., Nat. cent. Univ.*, 1940, 1, No. 2, 71-74.—This is a brief report on an arithmetic test for grades V and VI. The test has 2 forms, each containing 10 problems, arranged in the order of increasing difficulty, the time limit being 40 mins. The problems were mainly selected from current textbooks. Reliability and validity have been determined.—C. F. *Wu* (Chengtu).

2767. *Ai, W., & Fan, T. T.* [On the construction of an elementary school four-character phrase test.] *Stud. Educ. Psychol., Nat. cent. Univ.*, 1940, 1, No. 1, 88-92.—This is a brief report on a 4-character phrase test for use in grades IV-VI. 1200 phrases were selected by random sampling from current textbooks. Each semester has 2 forms of tests (altogether 6 tests in 12 forms), each containing 100 phrases of 4 characters. The children tested are required to choose the correct one of 4 characters given at the end of each phrase. The time limit for each test is 35 mins. Reliability and validity of the tests have been determined.—C. F. *Wu* (Chengtu).

2768. *Ansbacher, H. L.* On the permanence of college learning. *J. educ. Psychol.*, 1940, 31, 622-624.—Regarding R. I. *Watson's* statement (see XIII: 564) that about 50% of material learned is recognized correctly after a lapse of nearly 5 years it is to be said that this holds true if material learned "refers to knowledge acquired through a course in introductory psychology as well as outside such a course." However, if material learned refers exclusively to "knowledge acquired through such a course the figure is reduced to 27%."—R. M. *Bellows* (Maryland).

2769. *Bruner, H. B.* [Ed.] Some issues and problems raised by the Conference on Education for the Gifted. *Teach. Coll. Rec.*, 1941, 42, 432-460.—The subject-matter of the 13 seminars held in connection with the Conference on Education for the Gifted on December 13, 1940, was regrouped under the following 9 headings: the nature of giftedness; the gifted individual as a leader; physical and mental adjustment problems of the gifted child; the school curriculum for the gifted; the gifted student in the secondary school; problems in the education of the gifted at the college level; teachers of the gifted; administrative problems in the education

of the gifted; and parent education and the gifted child. In each case the important issues and problems raised in the seminars are summarized, together with some of the conclusions which were reached.—*L. Birdsall* (College Entrance Exam. Bd).

2770. **Buyse, R.** *Limitaciones de la experimentación en pedagogía.* (Limitations of experimentation in pedagogy.) *Psicotecnia*, 1940, 1, 193-199.—The author criticizes certain aspects of experimental pedagogy which tend to make many of its results unscientific. Among these are: vague terminology, contradictory formulae, selection errors, poor selection of problems, and lack of scientific procedure. He advocates an established terminology, definition of fundamental problems, precise techniques, proper use of statistics, systematic organization of problems, legitimate generalizations, and an understanding and close co-operation between pedagogy, philosophy, and the arts and sciences. Some problems are listed as deserving serious research: identification and specification of aptitudes and pedagogical functions; determination of causes which constitute immediate conditions of effect, of the relation between a condition and its effect, of optimal condition for academic presentation, and of factors which have prognostic value; and the discovery of individual disabilities and their adequate treatment.—*J. E. Bader* (Brandon State School).

2771. **Calandra, A.** *Scoring formulas and probability considerations.* *Psychometrika*, 1941, 6, 1-9.—Bayes' theorem of inverse probability is made the basis of a general equation for scoring objective examinations. The equation so obtained is evaluated by assuming a binomial distribution of examinee knowledge and guessing tendency. A graphical illustration of the application of this equation to a hypothetical test situation is presented. The limitations inherent in the use of Bayes' theorem make it inadvisable to recommend the practical use of the equation unless future experimental evidence indicates an increase in scoring validity which more than compensates for the increase in scoring difficulty.—(Courtesy *Psychometrika*).

2772. **Chen, H. H.** [The effect of the pattern of script on reading efficiency.] *J. Educ.* (Chinese), 1937, 27, No. 7, 1-12.—An experimental study was made on the effect of the 4 patterns of Chinese script on reading efficiency, viz., (1) the Sung type (with slender horizontal and thick vertical strokes, almost in a square form), (2) the imitating Sung type (with uniform slender strokes, in a vertical form), (3) the Chinese (hair) pen type (with broad strokes, all rounded out), and (4) the foreign (steel) pen type (uniform strokes, but varied in form). 120 elementary-school pupils, grades III-VI, served as subjects. The material consisted of 4 groups, each group in turn consisting of 4 phrases of 4 to 7 characters; it was printed vertically on white paper and presented by a tachistoscope. The results showed that reading efficiency in general increases with grade level and that it is greater with the

Chinese and the foreign pen types (probably due to their greater legibility). The Sung and the imitating Sung type were inferior.—*C. F. Wu* (Chengtu).

2773. **Chou, H. C.** [Yenching achievement tests.] Peiping: Yenching University, 1940.—Consists of middle school achievement tests, Forms A & B, 44 pages each, with 81 pages of directions; elementary school achievement tests, Forms A & B, 22 pages each, with 61 pages of directions.—*C. F. Wu* (Chengtu).

2774. **Darley, J. G.** *Counselling on the basis of interest measurement.* *Educ. psychol. Measmt*, 1941, 1, 35-42.—An illustration is given of the standard approach to the interpretation of the results obtained from the Strong Vocational Interest Blank. Reasons are given for considering it as the least effective clinical approach and suggestions made for an alternative one.—*P. S. de Q. Cabot* (Simmons).

2775. **Denney, H. R., & Remmers, H. H.** *Reliability of multiple-choice measuring instruments as a function of the Spearman-Brown prophecy formula, II.* *J. educ. Psych.*, 1940, 31, 699-704.—"A controlled experiment using eight hundred sixty-one rural-high-school pupils was designed to test the hypothesis that increase in reliability of multiple choice vocabulary test items with increase in number of response-alternatives per test item is predicted by the Spearman-Brown formula. For vocabulary test items varying in number of responses from two to five it is concluded that the experimental data completely support the hypothesis. In every case the predicted value of r did not differ significantly from that observed." (See also XV: 2810.)—*R. M. Bellows* (Maryland).

2776. **Faulkner, R.** *A survey of recent research in art and art education.* *Yearb. nat. Soc. Stud. Educ.*, 1941, 40, 369-377.—A list of bibliographical references is given under the headings of: history and theory of art; studies of color, line, and shape; talent and aptitude; art skills and abilities; perception, appreciation, and judgment; art interests and preferences; feelings and emotions; art tests; basic philosophy and research programs; bibliographies of research in art. The author notes that the most hopeful sign of much needed careful research in art is an increasing interest of students in graduate work in the arts.—*P. S. de Q. Cabot* (Simmons).

2777. **Figuerido, C. A.** *La selección orientadora del aprendiz.* (Orientation selection of the apprentice.) *Psicotecnia*, 1940, 1, 200-219.—The need of adequate preliminary training of apprentices is stressed. 64% of vocational students failed on final examinations, 32% of the entering students dropped classes, and 78% of the students were maladapted. At the end of the course it was found that in 78.6% of the cases the work of the student agreed with the prediction from the psychotechnical exams given on entrance. Selection of students on the basis of psychotechnical examinations, individual capacity, and cultural level is advocated for industrial and professional schools.—*J. E. Bader* (Brandon State School).

2778. Finley, M. H. The classroom as a social group. *Amer. J. Orthopsychiat.*, 1941, 11, 21-33.—This is a discussion of some of the group and interpersonal relationships within classes (from nursery school through VIIIth grade) that are significant in considering the problem child, a study of some problem children in the classroom setting, and a discussion of some social relationships within the class that can be used in dealing with problem children. "The success of the class is dependent on the leadership of the teacher as an adult, where she plays predominantly a mother role through the primary years, and takes on more the role of organizer, director, and teacher in the later years." The extent to which the teacher tries to meet the needs of an individual child by a close emotional relationship must be controlled by the extent to which this will affect the other members of the class. In the discussion, W. Grutzner gives some examples from the classes conducted at Bellevue Hospital by the Board of Education.—R. E. Perl (Jewish Board of Guardians).

2779. Gibbons, C. C. The predictive value of the most valid items of an examination. *J. educ. Psychol.*, 1940, 31, 616-621.—26 of the most valid items (the criterion was total score) on one test were selected, and the scores on these items alone were correlated with the total scores on each of 2 tests that contained them. This correlation was .90 for both tests, which was higher than the reliability of the whole test from which the items were selected. Bibliography.—R. M. Bellows (Maryland).

2780. Hackman, R. B., & Duel, H. W. Do high-school students who study a foreign language acquire larger vocabularies, spell their words more correctly and use better English than high-school students who study no foreign language? *J. Amer. Ass. colleg. Registr.*, 1941, 16, 155-162.—This is a report of a study over a period of 2 years of 346 high school students. Of these, 85 studied French, 26 German, 37 Latin, and 44 Spanish, in addition to English; 154 studied no foreign language. As measured by school grades and the Co-operative English test, the study of a foreign language is unrelated to gain in vocabulary or spelling, but is positively and significantly related to gains in usage, particularly if the foreign language is French or Spanish.—G. S. Speer (Central YMCA College).

2781. Haynes, B. R., Broom, M. E., & Hardaway, M. Tests and measurements in business education. Cincinnati: South-Western, 1940. Pp. 400. \$2.40.—Two major divisions comprise the contents of this book. (1) A main section of 237 pages and a concluding section of 40 pages describe the use that may be made of tests in business education, the statistical tools that are necessary, the types of test forms that are of value, and the method of constructing tests. Numerous examples clarify each point for the beginner. (2) A 100-page section contains a summary and descriptions of tests and test literature of possible value to testers in business education.—H. Moore (Business Research Corporation).

2782. Hewlett, T. C. Do the schools prepare for beginning jobs? *Occupations*, 1941, 19, 418-426.—A study of 1,099 placements made by the New York State Employment Service indicates that 42% of boys who attended a vocational high school were placed in jobs related to their training, graduates having a better chance than non-graduates of being so placed. 19% of girls who attended a vocational high school were placed in line with their training, the rest being placed in housework, retail and wholesale distribution, and service jobs. Boys who graduated from general high schools were placed most frequently in merchandise handling, service, and retail and wholesale distribution. Girls were placed in retail and wholesale distribution, clerical, and service jobs.—G. S. Speer (Central YMCA College).

2783. Horton, C. W. Achievement tests in relation to teaching objectives in general college botany. Charleston, Ill.: Committee on the Teaching of Botany in American Colleges and Universities of the Botanical Society of America, 1939. Pp. 71. \$0.50.—(*Educ. Abstr.* VI: 249).

2784. Hwang, I. [On the problem of psychology courses in the construction of the teachers college curriculum.] *Educ. News Wkly.* (Chinese), 1939, 2, No. 6, 4-6.—Instead of both, "general psychology" and "educational psychology," with similar content and scope, one such course is sufficient, so as to leave room for "psychology of school subjects" or "advanced psychology of learning." "educational statistics" should be renamed "statistical methods" and be made a prerequisite to all psychology courses. "psychology of school subjects" should be taught as a basic course. "child psychology" should be made a required course rather than "methods of testing and measurement," and the teaching of the latter should be improved.—C. F. Wu (Chengtu).

2785. Ibarrola, R., Mallart, J., & Ruiz-Castillo, L. La confección de profesiogramas para su aplicación a la orientación y selección profesional. (The preparation of profesiograms for application to professional orientation and selection.) *Psicotecnia*, 1940, 1, 228-252.—In a previous article by the authors (see XIV: 3711), the physiological examination used in the profesiogram was discussed. The present article continues the analysis of this data chart and covers in detail all the items under motor, psychomotor, psychological, and personality characteristics.—J. E. Bader (Brandon State School).

2786. Jackson, R. W. B. Some pitfalls in the statistical analysis of data expressed in the form of IQ scores. *J. educ. Psychol.*, 1940, 31, 677-685.—Precautions regarding use of indices such as IQ, EQ, and AQ in correlational analysis are urged, and examples of fallible conclusions based on their use are presented. Whether use of such indices causes spurious statistical results depends on the particular data and problem being investigated.—R. M. Bellows (Maryland).

2787. Jackson, R. W. B. Application of the analysis of variance and covariance method to

educational problems. *Univ. Toronto Dep. Educ. Res. Bull.*, 1940, No. 11. Pp. 103.—The general principles underlying the statistical method known as the analysis of variance and covariance are outlined. 8 examples illustrating how the analysis of variance method may be applied to educational problems (e.g., resemblance of identical twins in intelligence, the reliability of tests, the comparison of the ability of pupils in different classes in the same grade, etc.) are worked out in detail and their results interpreted. The extension of this method into the analysis of covariance is demonstrated by the solution of 3 examples in each of which 2 variates are considered.—V. J. Sharkey (Rochester).

2788. Knight, P. E., & Traxler, A. E. *Develop your reading*. Boston: Little, Brown, 1940. Pp. 383. \$1.36. Pupils' workbook, \$0.40; teachers' manual, \$0.25.—The author's have designed this as a textbook in developmental reading for the VIIIth and VIIIth grades or in remedial reading for the IXth and Xth. The textbook proper contains two parts, one dealing with rapid reading and one with close reading. Part 1 is divided into: to find fun in reading; to improve our rate of reading; to skim; to enlarge our vocabulary; and to find help in the dictionary. Part 2 is composed of: to discover the main idea; to retrace the author's pattern; to search for details; to see imaginative pictures; to share the author's feeling; to read aloud; and to review. Each section has a pre-test and end test. The workbook contains exercises based on the selections in the textbook. The teacher's manual offers suggestions for the use of each section of the textbook, as well as an answer key for the exercises in the pupil's workbook, and a bibliography of references on the teaching of reading. An effort is made to present material of intrinsic interest as well as appropriate difficulty.—R. Horowitz (New York City).

2789. Lindquist, E. F. *Sampling in educational research*. *J. educ. Psychol.*, 1940, 31, 561-574.—The author concludes that "stratified sampling will be used increasingly in educational research, not primarily because it minimizes the chance errors in random selection, but because through it we may avoid some of the large systematic errors which may have so often resulted in haphazard or fortuitous sampling, and which are doubly serious because their presence or magnitude cannot be gauged by mathematical formulas."—R. M. Bellows (Maryland).

2790. Loop, A. S. *Does type of education affect Negroes' careers?* *Occupations*, 1941, 19, 430-435.—This study of 6,799 Negroes living in Manhattan indicates that educational training influences the vocational careers of Negroes, and has proved of value in securing professional positions. There is an inverse relationship between amount of scholastic training and employment in domestic jobs. No appreciable effect of education was found in industrial, semi-professional, and professional service attendant fields. There is a tendency toward

slower vocational progress of the Negro, due to factors other than educational background.—G. S. Speer (Central YMCA College).

2791. Lossart, E. *Los sentimientos de inferioridad*. (Inferiority feelings.) *Bol. Educ. Santa Fe*, 1939, 5, No. 20, 19-21.—This is a statement of Adler's theory, as applied to the teacher's work. The aspects stressed are physical inferiority, the psychology of the proletarian child, the incapacity of rich children to meet later adversity, the family drama, and sex differences.—M. E. Morse (Baltimore, Md.).

2792. Mason, H. *Teachers' use of cathartic methods*. *Fort Hays Kan. St. Coll. Stud.*, 1940, No. 2, 11-23.—The purpose of the study was "to ascertain some of the difficulties experienced by teachers in eliciting emotional catharsis from their pupils and interpreting its results, and to describe these difficulties in such a way as to suggest some mode of attack upon them." An analysis of the teachers' difficulties showed the following to be the most important: (1) uncritical acceptance of the child's story, (2) dealing with problems the child creates rather than with his personal problems, (3) didactic procedures improperly used, (4) ineptitude at following trends in the material presented, (5) disruption of regular arrangements and disciplinary problems. A most glaring error in the technique of the teachers was their phrasing of questions in such a way as to give assurance or to suggest socially acceptable answers. For the most part teachers exhibited unusual tenseness in the cathartic situation.—W. E. Galt (Lifwynn Foundation).

2793. Mata, L. *Examen psíquico funcional en orientación y selección profesional*. (Functional mental examination in professional orientation and selection.) *Rev. Sanid. milit., B. Aires*, 1938, 37, 234-241.—Psychotechnics, the scientific organization of work, is considered in 2 aspects: professional orientation and selection. An analysis is presented consisting of: (1) the concept of the function of psychology, (2) the hierarchy of functions with their appraisable limits, (3) the individual from the point of view of functional psychophysics, (4) professional orientation and selection as a method for diagnosing aptitudes, (5) tests considered as elements of functional correlations, (6) psychological criteria in examinations of orientation, (7) classification of professions with the view of professional orientation and selection in mind.—N. Downs (U. S. Employment Service).

2794. McClusky, H. Y. *An experimental comparison of reading the original and digest versions of an article*. *J. educ. Psychol.*, 1940, 31, 603-615.—"Thirty-four pairs of college students were matched on the basis of an intelligence and reading test, forming two equivalent groups with respect to these measures. One group read the original version of one article, while the other group read the digest version of the same article. The experimental procedure was repeated by reversing the position of the two groups in reading the original and digest versions

of a different article. The results of both the immediate and delayed responses to two supplementary sets of comprehension questions are interpreted as indicating an impressive advantage for the group reading the digest version of the article."—*R. M. Bellows* (Maryland).

2795. **Mercer, M.** A study of student mortality in a home economics college. *J. educ. Res.*, 1941, 34, 531-537.—The records of 68 students in the Home Economics College at Cornell University who failed to complete their college work were studied. Considerable similarity was found between the entrance data of these students and those of the lowest ranking students who remained in college. Compared with the high ranking students, the leaving group showed less definite choice of vocation at the time of entering college and had less background for an adequate vocational choice. Aside from this, the only difference among the 3 groups was in qualities which may be inferred from the academic record at the time of admission.—*S. W. Fernberger* (Pennsylvania).

2796. **Moore, J. E.** Annoying habits of high school teachers. *Peabody J. Educ.*, 1940, 18, 161-165.—A total of 346 annoying habits and mannerisms of teachers were reported by 90 high school seniors. Habits of general attitude, such as "has favorites," "too authoritative," were reported as most annoying. "Women teachers were listed as having more annoying traits in every group, with the exception of classroom behavior, in which men led." Girls listed more habits as annoying than did boys.—*N. B. Cuff* (Eastern Kentucky).

2797. **Munro, T.** The psychological approach to art and art education. *Yearb. nat. Soc. Stud. Educ.*, 1941, 40, 249-288.—The difficulties in any psychological study of esthetic phenomena are due to the extreme subdivision and simplification of laboratory problems and to the exaggerated confidence in quantitative methods which apply peculiarly to American researches. Psychologists need to be educated more in the study of the humanities. Closer co-operation between psychologists and art teachers is desirable. The author discusses certain standards for the evaluation of children's art.—*P. S. de Q. Cabot* (Simmons).

2798. **Munro, T.** Creative ability in art and its educational fostering. *Yearb. nat. Soc. Stud. Educ.*, 1941, 40, 289-322.—In attempting to produce well adjusted personalities and to help children achieve optimal educational progress, educators may unwittingly cripple the development of potential creative artistic ability.—*P. S. de Q. Cabot* (Simmons).

2799. **Munson, G.** The course in self-appraisal and careers offered to seniors in the Chicago public high schools. *Educ. psychol. Measmt.*, 1941, 1, 43-58.—This is a description and outline of the course constituting the final step in the Adjustment Service operating on the Chicago public high schools since 1937. Titles of references for students and teachers are given and sources of more complete

information about the course listed.—*P. S. de Q. Cabot* (Simmons).

2800. **Myers, G. E.** Principles and techniques of vocational guidance. New York: McGraw-Hill, 1941. Pp. xii + 377. \$3.00.—Vocational guidance is viewed as an integral but specialized part of the educational program. Accepting the definition of the National Vocational Guidance Association in its 1937 revision, the author elaborates on the relation of vocational guidance to and its differences from other kinds of guidance and pupil personnel work. It is to be considered as a community enterprise, centered in the public schools, especially in those on the secondary level. 8 services are provided in a comprehensive program: vocational information, self-inventories, collection of personal data, counseling, vocational preparation, placement, follow-up, research. The effectiveness of the program depends largely upon the administrative set-up. It is recommended that vocational guidance be made a part of the pupil personnel department, coordinate with the divisions of attendance, health, and research.—*H. Beaumont* (Kentucky).

2801. **Myslakowski, E.** Lugar que ocupa la enseñanza de la psicología. (The place of psychology [in normal schools].) *Bol. Educ., Santa Fe*, 1940, 5, No. 21, 17-22.—Of the 43 countries which answered the questionnaire of the International Office of Education, in connection with the Sixth International Conference on Public Education, all except Italy required the teaching of psychology in normal schools. The author's own views are that the value of such courses consists in inoculation of the students with the psychological and genetic attitudes and acquisition of proper methods for the solution of every-day problems. It is more advisable to concentrate in certain fields than to try to cover the subject systematically. The most important aspects are those concerned with intelligence, will, qualitative mental development, educational applications of psychoanalysis, social psychology of the child, vocational aptitudes, and abnormal children. General psychological problems are encountered genetically in child psychology. The course should be devoted chiefly to the student's own activity, and some original research, however modest, should be required. The course is best taught by a child psychologist with university connections.—*M. E. Morse* (Baltimore, Md.).

2802. **Nemzek, C. L.** Direct and differential prediction of academic success as measured by the Stanford Achievement Test. *J. soc. Psychol.*, 1941, 13, 71-87.—Chronological age at entrance to elementary school, education of father, education of mother, and occupational status of father have negligible value for the prediction of academic success as measured by the Stanford Achievement Test.—*G. Brighthouse* (Occidental).

2803. **P'an, S.** [On the problem of psychology courses in normal schools.] *Educ. News Wkly.* (Chinese), 1940, 3, No. 48, 5-8.—The author suggests that normal education should be divided into

2 divisions, the lower division emphasizing basic training in subjects to be taught in elementary schools and instruction in fundamental methods of teaching, the upper division emphasizing professional training (such as educational psychology, educational testing and measurement, child psychology, principles of education, educational administration, educational history, ethics, etc.) for 1 or 2 years. Only graduates of the lower division with 2 or 3 years of teaching experience should be admitted to the upper division.—*C. F. Wu* (Chengtu).

2804. **Peck, L., & McGlothlin, L. E.** *Children's information and success in first-grade reading.* *J. educ. Psychol.*, 1940, 31, 653-664.—Information, reading readiness, MA, and personality adjustment (as measured) seemed most significantly related to reading achievement; all 4 of these coefficients of correlation were in the 60's. 100 first grades were used as subjects. IQ correlated .48 and socioeconomic status (Sims) correlated .33 with scores on the reading test used. Reading readiness correlated .87 with MA and .23 with socioeconomic status. Personality ratings correlated .60 with both achievement scores and teachers marks. Sex differences are considered, the tests described, and a bibliography is appended.—*R. M. Bellows* (Maryland).

2805. **Pilley, J. G.** *The national teacher examination service.* *Sch. Rev.*, 1941, 49, 177-186.—Because the National Teacher Examinations, developed under the sponsorship of the American Council on Education, will have a far-reaching influence in this country, a critical evaluation of the underlying principles is in order. The multiple-choice questions comprising the 3 main parts of the test, which is designed as a supplementary measure of the candidate's "knowledge and ability to use that knowledge," were selected not on the basis of their correlation with good teaching, but primarily because they satisfied criteria of statistical methodology. Since the examination is essentially a test of factual knowledge, its influence will impede the present trend to a more reflective and personal kind of education. It is hoped that future revisions will remedy the present subordination of value judgments to the demands of statistical methodology.—*R. C. Strassburger* (St. Joseph's College for Women).

2806. **Piscart, R.** *Echelle objective d'écriture.* (Objective handwriting scale.) Louvain: Université de Louvain, 1939.—[Abstracted review; original not seen.] According to the author teachers tend to overestimate the work of the mediocre writers and to underestimate the work of the best. He has constructed a scale for judging handwriting which was tried out in 483 schools in Belgium.—*J. E. Bader* (Brandon State School).

2807. **Reed, H. O.** *The midget wiggly block test for mechanical ability.* *Industr. Arts voc. Educ.*, 1941, 30, 153-154.—The author reports the construction of a 4 block test of mechanical ability. Reliability was determined by correlation between the 2 most consistent of 3 or 4 trials ($r = .90$), and

by test-retest ($r = .82$). Validity was measured by correlation with shop marks, teachers' ratings, and a shop project. It is concluded that the test is reliable, and that it is more valid for machine shop than general shop. The test may be used for grouping VIIth and VIIIth grade boys in general shop. The correlation with general intelligence is negligible.—*G. S. Speer* (Central YMCA College).

2808. **Remmers, H. H., & Gage, N. L.** [Eds.] *Two thousand test items in American history.* Lafayette, Ind.: State High School Testing Service for Indiana, 1941. Pp. vi + 110. \$0.90.—These items are based on the State of Indiana course of study in American history, are the joint product of test technicians and subject-matter experts, and are statistically validated, to a large extent, on samples of 1000 high school pupils' papers. The items include the following types: free multiple choice, controlled multiple choice, coherent groups, matching, historical sequence, true-false, completion, allocating powers, grouped names, and same-opposite vocabulary.—*L. M. McCabe* (Cambridge, Mass.).

2809. **Remmers, H. H., Karslake, R., & Gage, N. L.** *Reliability of multiple-choice measuring instruments as a function of the Spearman-Brown prophecy formula, I.* *J. educ. Psychol.*, 1940, 31, 583-590.—Evidence indicates that in a multiple choice situation an increase in the number of choices may result in increased reliability and that this increment may be a function of the Spearman-Brown prophecy formula. The latter hypothesis was tested empirically, the results favoring the hypothesis. Certain discrepancies are discussed. Bibliography.—*R. M. Bellows* (Maryland).

2810. **Robinson, J. B., & Bellows, R. M.** *Characteristics of successful dental students.* *J. Amer. Ass. colleg. Registr.*, 1941, 46, 109-122.—Success in certain courses of the first 2 years of dental school was found to be associated with: performance on certain subtests of the MacQuarrie Test for Mechanical Ability, score on a finger dexterity test, performance measured by the Cooperative Chemistry and Cooperative Zoology Achievement Tests, interest as measured by the Strong blank, pre-dental point-hour ratio, and number of semester hours credit in chemistry.—*F. W. Finger* (Brown).

2811. **Rogers, M. M.** *Arithmetic without fear.* *Ment. Hlth, Lond.*, 1940, 1, 112-114.—In answering a questionnaire, 13% of the students of a British training college said they hated arithmetic, while 65% said they liked it. Specific diagnosis of difficulties, teaching by the use of real life problems, and child guidance treatment for problem children are advocated as aids in decreasing the percentage of students hating arithmetic.—*D. Miller* (U. S. Employment Service).

2812. **Scates, D. E., & Spencer, D. K.** *Retroactive experiments on effects of military training in high school.* *Sch. Rev.*, 1941, 49, 195-205.—High school graduates with 2 years of military training as compared with students of the same class who

had had no military training proved to be originally a generally superior group in intelligence, scholarship, and extra-curricular activities. The initial superiority of the cadet group was enhanced under the stimulus of military training in athletic and club participation, in school attendance, and in punctuality. No significant differences in attitude toward war existed between the cadets and non-cadets, both groups being rated as mildly pacifistic.—*R. C. Strassburger* (St. Joseph's College for Women).

2813. Seyler, E. C. The value of rank in high school graduating class for predicting scholastic achievement in college. *J. Amer. Ass. colleg. Registr.*, 1941, 16, 123-133.—"Rank in high school graduating class . . . offers a means of predicting scholastic success in college which has a distinctive value and which requires a minimum of time, effort and expense to put into practical use."—*G. S. Speer* (Central YMCA College).

2814. Shanner, W. M., & Kuder, G. F. A comparative study of freshman week tests given at the University of Chicago. *Educ. psychol. Measmt.*, 1941, 1, 85-92.—Correlations between various freshman week test scores and average examination grades are reported and discussed. Marks in 4 introductory general courses (biological sciences, humanities, physical sciences, and social sciences) "can be predicted by combining two fairly short primary abilities measures about as well as by using the one-hour A. C. P. E. or the two-hour scholastic aptitude test of the C. E. E. B."—*P. S. de Q. Cabot* (Simmons).

2815. Shen, E. Note on the scoring of matching tests. *J. educ. Psychol.*, 1940, 31, 625-626.—In matching tests the more cautious subjects are unfairly penalized for their omissions. A formula is offered for correcting the effects of guessing.—*R. M. Bellows*. (Maryland).

2816. Sievers, C. H., & Brown, B. D. Improving your eye movements in reading: a graded series of reading exercises using the Stone basic vocabulary. Wichita, Kan.: McGuin Publ. Co., 1940. Exercise book pp. 81. \$0.47. Methods manual pp. 43. \$0.37.—In the controversy as to whether faulty eye movements are a cause of poor reading or the result of poor reading habits the authors feel that both views are partially correct. They believe that eye movement training should be a part of the instruction in reading, as well as extensive use of reading material. The exercise book consists of words from the various levels of the Stone basic vocabulary for drill, also word groups, stories printed with extra spacing between word groups, and comprehension checks. The use of the metronome in attaining speed and rhythm in reading is emphasized.—*L. M. McCabe* (Cambridge, Mass.).

2817. Sones, A. M., & Stroud, J. B. Review, with special reference to temporal position. *J. educ. Psychol.*, 1940, 31, 665-676.—The objective test is valuable as a review. Testing reviews were superior to rereading reviews for one temporal position. When objective tests were used for review-

ing, there was an advantage in favor of early reviews; this advantage did not hold for rereading reviews. Bibliography.—*R. M. Bellows* (Maryland).

2818. Stückrath, F. Die Einführung in die psychologische Betrachtung der eigenen Erziehungs- und Unterrichtsversuche als Aufgabe der Lehrerbildung. (Introduction to the psychological consideration of the student's practice teaching as a task of teacher education.) *Z. pädag. Psychol.*, 1940, 41, 220-230.—Stückrath discusses the psychology of several illustrative situations which the student meets in practice teaching. Working out through discussion the psychological content of educational methods prevents pedagogy from becoming a purely theoretical science. The student teacher must have not only a knowledge of child nature but an inner bond with the ideology of the German people. All educational methods are directed to giving the student teacher an advanced understanding of this purpose.—*M. E. Morse* (Baltimore, Md.).

2819. Stuit, D. B. The prediction of scholastic success in a college of medicine. *Educ. psychol. Measmt.*, 1941, 1, 77-84.—According to this study, "liberal arts grade point averages are the best predictive indices of success in first year medicine." The Moss Medical Aptitude Test did not predict the students' achievement level with high precision, while the correlation between the Iowa Qualifying Examination scores and grades in freshmen medicine were very low. The criterion of success in medicine needs to be defined more precisely. It is suggested that average achievement in aptitude tests and liberal arts work together with a high degree of interest and motivation will serve as a satisfactory basis for predicting later scholastic success.—*P. S. de Q. Cabot* (Simmons).

2820. Symonds, P. M. Personality adjustment of women teachers. *Amer. J. Orthopsychiat.*, 1941, 11, 14-21.—In selecting young women for teaching one must recognize the needs which teaching satisfies. As a result of an analysis of teacher needs, 15 reasons why teaching is selected as a vocation by women have been listed. In selecting teachers, the quality of personality adjustment must be taken into account; more attention should be given to the individual and her problems. Teachers should be relieved of anxiety and given greater security in their work; there should be a counselor with whom they could talk; they should be encouraged toward self-exploration and made aware of the extent to which their work is administering to their needs. Schools will attract as teachers persons having different psychological needs as schools change their philosophy and methods.—*R. E. Perl* (Jewish Board of Guardians).

2821. Timberlake, J. B., & Montgomery, R. B. Why do some deaf students succeed among hearing students? Comments on the records published by the Volta Bureau. *Volta Rev.*, 1940, 42, 756-764.—In discussing this question the authors present tables showing that 709 deaf students received 848 diplomas from institutions for hearing students

between the years 1877 and 1939. 680 of these were high school diplomas or better; 167 were college or university degrees. A list of 148 schools for the deaf showing the total number of graduates from each and the number of these graduates who subsequently received diplomas from institutions for hearing students is also presented. The authors dismiss the possibility that the success of these students was due to greater amounts of residual hearing, or to their superior intelligence. "Their success is due mainly to the fact that those who gave them their special education led them to believe that, by making the very best effort of which they were capable, they might be able to enter the regular schools and conquer the difficulties imposed by their deafness."—C. V. Hudgins (Clarke School).

2822. Tinker, M. A., Hackner, F., & Wesley, M. W. Speed and quality of association as a measure of vocabulary knowledge. *J. educ. Psychol.*, 1940, 31, 575-582.—Subjects with higher vocabulary knowledge tended to have faster word associations. When items in the free-association test were the same as in the vocabulary test, a correlation of .83 was found between quality of associative responses and vocabulary score; when the items in the free-association test were different from those in the vocabulary test, a substantial but low correlation was found between quality of associative responses and vocabulary knowledge. The authors conclude that the "free-association technique may be employed to measure specific vocabulary knowledge."—R. M. Bellows (Maryland).

2823. Turse, P. L. Turse shorthand aptitude test. Yonkers-on-Hudson: World Book, 1940. Pp. 8. \$1.30 for 25.—The test consists of 7 parts covering stroking, spelling, phonetic association, symbol transcription, word discrimination, dictation, and word sense. A key and directions for scoring and a class record blank are supplied, as well as a 6-page manual of directions. A correlation of .67 was obtained between the total aptitude score and achievement at the end of 2 years' instruction (N = 268). The odd-even reliability coefficients for the subtests range from .86 to .95, while that for the total score was .98 (N = 268).—L. M. McCabe (Cambridge, Mass.).

2824. Weimer, H. Fehlerverhütung und Fehlervermeidung. (Prevention and avoidance of mistakes.) Düsseldorf: Hoch, 1939. Pp. 328.—[Abstracted review; original not seen.] The evaluation and treatment of mistakes has proceeded from the psychological to the educational. Weimer distinguishes prevention from avoidance, in that the former is the responsibility of the teacher, the latter, of the pupil. This dual consideration is supported by numerous illustrations from the educational and psychological literature.—M. E. Morse (Baltimore, Md.).

2825. Williamson, E. G., & Bordin, E. S. The evaluation of vocational and educational counselling: a critique of the methodology of experiments. *Educ. psychol. Measmt.*, 1941, 1, 5-24.—Any attempt to improve the present inadequate methods of evaluat-

ing counselling procedures must take stock of the following considerations: an explanation of the assumptions underlying the criteria of evaluation; behavior must be observable or measurable; the optimum time interval for evaluation; the assumptions of effective counselling; the choice of such partial criteria as academic achievement, educational and vocational choices, cooperation with counsellor, the student's satisfaction, success on the job, quality of case work, and predictive efficiency. Suggestions for a judgment criterion are considered and the general difficulties of evaluation indicated.—P. S. de Q. Cabot (Simmons).

2826. Wood, L., & Shulman, E. The Ellis Visual Designs Test. *J. educ. Psychol.*, 1940, 31, 591-602.—The Ellis Visual Designs Test is the only graded measure of visual memory. Results pertaining to development of standards for administration, a scoring scheme, and norms for this test are discussed. Reliability and validity of the test were not investigated. The test is now useful to indicate extremes of visual ability in memory and reproduction.—R. M. Bellows (Maryland).

2827. Wu, L. T. [A study of children's errors.] *Phil. & Educ.* (Chinese), 1937, 5, No. 2. Pp. 11.—An analysis of 206 errors collected from 165 examination papers showed that most errors were made by using characters with the same sound but with different form and meaning, by making superfluous strokes, or by omitting strokes. Characters most liable to be wrongly reproduced, causes of the errors, and measures for their correction are given.—C. F. Wu (Chengtu).

2828. Zulliger, H. Psychoanalytic experiences in public school practice. (Trans. by G. V. Swackhamer.) *Amer. J. Orthopsychiat.*, 1941, 11, 157-172.—This continuation of an earlier article (see XV: 1536) includes a case of onanism, a young anxiety neurotic, nervous writing, a failing calculator, accidental occurrences.—R. E. Perl (Jewish Board of Guardians).

[See also abstracts 2458, 2602, 2682, 2838, 2856.]

MENTAL TESTS

2829. [Anon.] Hilfsmittel zur Intelligenzprüfung nach Binet-Bobertag. (Material for intelligence testing according to Binet-Bobertag.) (New edition.) Berlin: Deutsches Zentralinstitut für Erziehung und Unterricht, 1940.

2830. Berger, A. A note on reliability in the Kuhlmann individual tests of mental development. *J. educ. Psychol.*, 1940, 31, 710-712.—"Kuhlmann's attempt to arrive at a measure which is constant, yet not necessarily reliable, is inconsistent."—R. M. Bellows (Maryland).

2831. Bowers, E. V., & Woods, R. C. A study of the experiential factor on intelligence test scores. *J. educ. Res.*, 1941, 34, 509-515.—1734 freshmen were given the Carnegie Mental Ability Test and the Schrammel-Brammer Revision of the Army Alpha test at Marshall College between 1935 and

1938. A record of the number of objective tests previously taken by each student was correlated with the scores made on the freshman test. The results indicate that the scores on freshman psychological examinations consistently improve with the number of previous experiences in taking objective tests. Also, the amount of improvement in scholastic achievement between mid-semester and the end of the semester of the freshman year was greater for the no-experience group than for those who had had experience. The tendency for those with experience in objective tests to make a higher score than those without such experience follows a law of diminishing returns and no apparent advantage is noticed after 3 or 4 experiences in taking such tests. The author believes that the differential may be one of confusion occasioned by a novel experience.—S. W. Fernberger (Pennsylvania).

2832. Brody, M. B. The 1916 Stanford-Binet vocabulary test revised for rapid routine practice. *J. ment. Sci.*, 1941, **87**, 88-95.—The 100 words are arranged according to their difficulty for British subjects and a technique of giving every 5th word until the subject has some difficulty, and then of giving every word is outlined. Results for 150 mental patients aged 18-81 are given. Scoring follows Babcock's norms, and scores for superior, normal, dull, and defective groupings are also suggested. Qualitative interpretations of responses are suggested to show how the stream of mental activity and the patient's attitude and mood may be revealed. "Demented patients characteristically exhibit eight forms of behaviour—slow and incomplete comprehension of the task, emotionalism, excuses and escape behaviour, 'concrete approach,' guessing, perseveration, mispronunciation, and defective self-criticism and lack of insight. . . . When they are repeatedly and grossly exhibited by a patient who achieves a good total score, dementia is probably present."—W. L. Wilkins (Milwaukee, Wis.).

2833. Burt, C., & Rivas, M. P. Tests stand-
arizados de Northumberland. (Northumberland tests.) *Bol. Educ., Santa Fe*, 1940, **5**, No. 22, 49-56; No. 23, 56-63; No. 24, 95-102.—A Spanish translation and adaptation, with instructions for scoring.—M. E. Morse (Baltimore, Md.).

2834. Herring, J. P. The measurement of mental growth. *J. educ. Psychol.*, 1940, **31**, 686-692.—Use of the intelligence quotient results in much confusion in interpreting mental growth data. The concept of rate of change of mental level is offered as a more suitable basic concept.—R. M. Bellows (Maryland).

2835. Hsiao, H. H. [An elementary school intelligence test.] Shanghai: Commercial Press, 1939. \$2.50 Mex. pkg. of 25.—The test may be used in the entrance examination of elementary school pupils and as a basis for classification of Ist and IInd grade pupils. (See XV: 566.)—C. F. Wu (Chengtu).

2836. Hsiao, H. H. [Hsiao's revision of Goodenough's test of intelligence for children.] *Monogr.*

Psychol. Educ., Nat. cent. Univ., 1939, **4**, No. 1, Pp. 51. \$2.00 Mex., or U. S. \$.50.—This monograph reports in 4 chapters: (1) origin and construction of Goodenough's test of intelligence by drawings, (2) details of the revision and results, (3) the possible effect of training on the test scores, and (4) methods of applying the revision. The task of drawing a man has been changed to "a man with short gown." The children are told to draw the front view and include the hands; fingers and the number of fingers are not scored. The subjective elements of scoring have been analyzed and standardized. The revision has been administered to more than 4000 children in 11 elementary schools at Nanking, about half of whom belonged to middle class families. The new scoring criteria have been validated against age and school performance. No sex differences were found. 143 scoring key drawings and 8 frequency distributions are appended.—C. F. Wu (Chengtu).

2837. Kvaraceus, W. C. Pupil performances on the abbreviated and complete new Stanford-Binet scales, Form L. *J. educ. Psychol.*, 1940, **31**, 627-630.—Comparison of the performance of 214 boys and girls on the abbreviated and complete Stanford-Binet scales, Form L, indicated a tendency to gain in both IQ and MA on the complete scale. Greater dispersion was found for scores on the complete scale.—R. M. Bellows (Maryland).

2838. Manuel, H. T., Adams, F. J., Jeffress, S., Tomlinson, H., & Gragg, D. B. The new Stanford-Binet at the college level. *J. educ. Psychol.*, 1940, **31**, 705-709.—IQ's derived from the new Stanford-Binet of 53 college freshmen gave a mean of 126.7 ± 12.4 . IQ's are compared to scores on the American Council Psychological Examination, Form 1938. IQ's, ACE performance, and a word-number test correlated .45, .30, and .40, respectively, with grade-points.—R. M. Bellows (Maryland).

2839. Mitchell, M. B. The revised Stanford-Binet for adults. *J. educ. Res.*, 1941, **34**, 516-521.—3 groups of adult subjects were used: 155 patients examined at the Psychopathic Hospital at the University of Iowa; 67 freshmen at Iowa, selected on the basis of their rating on the Iowa Qualifying Examination; and 87 senior medical students. Both the 1916 and the 1937 Stanford-Binet tests were given. For each of the 3 groups the 1937 test gave a considerably higher score than the 1916 form. For the psychopathic group the mean IQ was 105 as compared with 91 on the 1916 form; for the medical students it was 131 as compared with 110 on the 1916 form.—S. W. Fernberger (Pennsylvania).

2840. Pintner, R. Superior ability. *Teach. Coll. Rec.*, 1941, **42**, 407-419.—The author reviews the history of the use of testing in selecting individuals of superior ability, from the time of Plato down to the present. A brief description of Leta S. Hollingworth's work with the gifted is included. In looking to the future, we should give more attention to producing more individuals who possess great potentialities, find means of discovering these indi-

viduals, and then educate them properly. Measuring instruments must be improved, the search for talent must be more widespread, and the gifted child must be given the opportunity for developing his abilities.—*L. Birdsall* (College Entrance Exam. Bd).

2841. Redmond, M., & Davies, F. R. J. The standardization of two intelligence tests. *Educ. Res. Ser., N. Z. Coun. Educ.*, 1940. Pp. xiv + 129.—An account of the standardization in New Zealand of two group tests of intelligence is given. The survey involved 26,000 children in over 500 schools. The aim has been to present the material in such a way that it could be readily understood by anyone with no more than a general knowledge of theory and practice of intelligence testing and some slight acquaintance with statistical techniques.—*M. Keller* (Butler Hospital).

2842. Reymert, M. L., & Meister, R. K. A comparison of the original and revised Stanford-Binet intelligence scales. *Educ. psychol. Measmt*, 1941, 1, 67-76.—On the basis of data collected from 440 normal children who had taken 958 original and 823 revised Stanford-Binet examinations, the following results are noted: (1) reliabilities for both scales were .80; (2) in both scales children with low IQ gained more upon retest than those of average IQ, while those of superior IQ tended to lose; (3) in the original scale there was a small increase in net gain with increasing age, while a decrease in the amount of gain appeared in the revised scale; (4) the scatter on the revised scale was greater and reached its maximum later than on the original scale; (5) generally, the revised scale takes longer to administer than the original one; (6) inversions of basal year scores were more frequent in the revised scale than in the original although the difference was not statistically significant.—*P. S. de Q. Cabot* (Simmons).

2843. Richards, T. W. Genetic emergence of factor specificity. *Psychometrika*, 1941, 6, 37-42.—Mental test data of Chrysostom and of Garrett, Bryan, and Perl are reinvestigated in order to determine the shifts in test clusters with chronological age. It is found that the factors under survey tend to become more independent with increasing age.—(Courtesy *Psychometrika*).

2844. Richardson, M. W. The logic of age scales. *Educ. psychol. Measmt*, 1941, 1, 25-34.—The age scale technique has no advantage over group test methods and does not adequately meet any of the 3 following requirements of mental measurement: origin of measurement; equality of units; isolation of a single unitary variable to be measured. "It is recommended that the age scale technique in its present form be abolished in its entirety and that it be supplanted by reliable homogeneous group tests of single functions."—*P. S. de Q. Cabot* (Simmons).

CHILDHOOD AND ADOLESCENCE

2845. Ackerly, S., & Mellor, R. The value of a nursery school in psychiatric set-up. *Amer. J. Orthopsychiat.*, 1941, 11, 172-175.—This paper

describes the affiliation of a nursery school with a mental hygiene clinic. The nursery school did much to bring to the clinic a number of pre-school problem children who would not ordinarily get there, through its influence parents accepted the benefits of psychiatric treatment more readily, and the teaching of child guidance by the demonstration method was made available.—*R. E. Perl* (Jewish Board of Guardians).

2846. Alpert, A. The latency period. *Amer. J. Orthopsychiat.*, 1941, 11, 126-133.—The author's experience with thousands of children, observed over a 10 year period, indicates that the more closely children are observed in a relatively free environment, the less fixed does the latency period appear, both as to chronological boundaries and as to concept. Cases are discussed to illustrate that psychology and education have much to learn about the mechanism of repression and its effect upon the emerging personality.—*R. E. Perl* (Jewish Board of Guardians).

2847. Ames, V. C. Effect of expressive methods of child psychotherapy upon intellectual efficiency. *Fort Hays Kan. St. Coll. Stud.*, 1940, No. 2, 24-38.—The study was designed to investigate the effect upon intellectual efficiency of training children in certain expressive methods. The expressive methods were looked upon as affording a catharsis for unexpressed ideas and conflicts in the child. There should result, then, greater integration within the child's personality and a corresponding increase in mental efficiency. The training media consisted of finger painting, clay modeling, dramatization, and freehand drawing. 7 children were used in the investigation, divided into 3 types: mentally retarded, overaggressive, and inhibited. There was some increase in IQ after the training period.—*W. E. Galt* (Lifwynn Foundation).

2848. Bender, L., & Vogel, F. Imaginary companions of children. *Amer. J. Orthopsychiat.*, 1941, 11, 56-66.—Many American psychologists seem to hold the view that the child's use of his capacity to phantasy is unwise and that his creation of imaginary companions is unhealthy. The authors studied a group of 14 cases in which imaginary companions played an important part in the psychological life of the child. They found that the creation of imaginary companions is a positive and healthful mechanism, used by the child to supplement deficient environmental experiences and emotional inadequacies. Two particular factors contribute most to the creation of these phantasies: (1) unsatisfactory parent-child relationship (weak superego), and (2) unsatisfactory real experiences, due to unfavorable social or economic situations. The imaginary companion is the representation of varied psychological mechanisms. When the psychological need no longer exists and the environmental stresses are not so overwhelming, the imaginary companion is given up and seems to pass into the unconscious.—*R. E. Perl* (Jewish Board of Guardians).

2849. Bradley, C., & Bowen, M. Amphetamine (benzedrine) therapy of children's behavior disorders. *Amer. J. Orthopsychiat.*, 1941, 11, 92-104.—This is a report of a 3 year study of the clinical effects of amphetamine sulphate on 100 children suffering from a variety of behavior disorders and a discussion of the probable mode of action of the drug. The drug produced a subdued type of behavior in 54 children, failed to alter the activities of 21, and induced psychomotor stimulation in 19 patients. 6 children responded only with improved scholastic achievement while 7 became clinically worse. Therapeutic effects bore no relation to clinical diagnosis. The theory is suggested that this drug influences the behavior of children by altering their emotional reaction to irritating situations.—R. E. Perl (Jewish Board of Guardians).

2850. Brigden, R. L. Psychological service in Kansas children's institutions. *Trans. Kans. Acad. Sci.*, 1940, 43, 333-335.—Data are reported from the first 6 months of psychological service in the Kansas Industrial School for Girls and the State Orphan's Home. Plans for future work are stated.—W. A. Varvel (Chicago, Ill.).

2851. Cappeller, R. Freier Umgang drei- bis sechsjähriger Kinder mit Montessori Material. (Free use of Montessori material by three to six year old children.) *Neue psychol. Stud.*, 1939, 8, No. 3. Pp. 189.—[Abstracted review; original not seen.] In this discussion of the psychology of the Montessori method and Gestalt play the question is raised whether the use of Montessori material for teaching purposes represses spontaneous play with it. Observations on 84 children prove that free use differs greatly from didactic use. The Montessori psychology overlooks the genetic primacy of primitive kinds of experience, not visual, but tactile, motor, acoustic, and especially volitional and affective. It fosters an artificially precocious sensory education and intellectualization, incompatible with the psychology of the Leipzig school. Children's structural capacities develop best in a normal home with many kinds of play material, but without teaching.—M. E. Morse (Baltimore, Md.).

2852. Chao, F. Inquietud infantil. (The overactive child.) *Bol. Educ., Santa Fe*, 1940, 5, No. 25, 12-15.—The former director of the children's home in Madrid discusses the constructive attitude toward the turbulent child. The usual policies are either repression, or, when it is realized that there is something intelligent and dynamic in his overactivity, to do nothing, in the hope that he will outgrow it. Simply putting him to shop or agricultural work is inadvisable because he interprets it as punishment. The understanding solution is to discover what he is trying to express and then firmly and definitely to direct his activity to this end. The teacher is the center of this program.—M. E. Morse (Baltimore, Md.).

2853. Dunmire, H. A study in visual space disorientation. *Trans. Kans. Acad. Sci.*, 1940, 43, 339-341.—A spatial orientation test was applied

to 25 children referred to a child guidance clinic and to 109 college freshmen. The author states with reference to the clinic cases: "No characteristics were noted as being common to handedness, confusion or visual space disorientation in particular." Difficulty in the test seemed to be confined to the younger subjects.—W. A. Varvel (Chicago, Ill.).

2854. Forgione, J. D. El sentimiento de inferioridad en los niños. (Inferiority feelings in children.) *Bol. Educ., Santa Fe*, 1940, 5, No. 22, 25-38.—To an adolescent or young adult, inferiority feelings may act as a spur; to a child, they are crushing. The ordinary school organization accentuates inferiority feelings through its antiquated system of marks, prizes, honors, the teacher's inconsiderate gestures and remarks, and, above all, through subjection of children of differing capacities and tastes to a rigid curriculum. The absence of comparison and of stimuli to rivalry is one reason for the sociable atmosphere in classes for retarded children. The relation of inferiority feelings to truancy and delinquency is discussed.—M. E. Morse (Baltimore, Md.).

2855. Fox, E. Emergency hostels for difficult children. *Ment. Hlth, Lond.*, 1940, 1, 97-102.—The many problems which arose because the Ministry of Health made no special provisions for the hostelling of difficult children in the evacuation of London are discussed. It is claimed that the inadequacies of present hostels will be corrected by a program which includes classification of hostels according to types of cases, classification of cases according to psychiatric diagnosis, training courses for hostel personnel, and a system of travelling social workers to meet the needs of each hostel.—D. Miller (U. S. Employment Service).

2856. Griffiths, B., Stimson, M., & Witmer, H. Factors influencing changes in school adjustment between kindergarten and the second grade. *Smith Coll. Stud. soc. Work*, 1941, 11, 191-284.—The investigation confirms that the relation between favorable home conditions, socio-economic as well as psychological, and good adjustment in school is very high, while the factor of the teacher's influence varies with the needs of the children. On the whole, good adjustment in kindergarten was highly predictive of similar adjustment 2 years later.—K. S. Yum (Chicago).

2857. Harton, J. J. Can all parents expect phenomenal growth in the IQ's of their children. *J. educ. Res.*, 1941, 34, 506-508.—The author agrees with Wellman's recommendation to parents for improving the IQ's of their children as reported in *National Parent-Teacher*, 1939, 33, 17-18, but cautions against the hope for an almost unlimited increase in IQ for all children.—S. W. Fernberger (Pennsylvania).

2858. Ling, B. C. Form discrimination as a learning cue in infants. *Comp. Psychol. Monogr.*, 1941, 17, No. 2. Pp. 66.—2 or more blocks differing in shape were presented on a board to 50 infants between the ages of 6 and 15 months. The "correct"

form was in each case sweetened with saccharine, the "incorrect" forms were fixed to the board so that the child could not lift them. Several geometrical forms were used. Discrimination of form *per se* was present as early as 6 months. Changes in relative position, spatial orientation, or size of either or both positive and negative stimuli had slight effect on discrimination. Difficulty increased with the number of blocks. 22% of the infants showed insight following a sudden reversal of the correct and incorrect forms. Preference for complex angular forms (as compared with a circle) was noted. Order of presentation affected difficulty of discrimination. After learning the initial discrimination it was possible, theoretically, to select the correct form without further trial and error. There was, however, only one instance of such insight. Wide individual differences were noted. One fourth of the learning curves had plateaus, probably due to the difficulty of the discrimination and fluctuations in interest and attention. Incidental data on handedness, transfer, affective reactions, vocalization, mouthing, and motivation are reported. Bibliography of 65 titles.—*N. L. Munn* (Vanderbilt).

2859. Lord, F. E. A study of spatial orientation of children. *J. educ. Res.*, 1941, 34, 481-505.—A number of tests, involving such problems as pointing in the direction of nearby and far away cities, making simple sketches of such relations, imagining of orientation in the community, and maintaining orientation during travel, were given to 173 boys and 144 girls, grades V-VIII, in typical rural schools in southern Michigan. The results show that children do not have a well-generalized notion of the cardinal directions, and there is little evidence that they have had the preliminary exercises and experiences which help them in learning directions and fixing the conventional pattern in mind. The tests demonstrated wide individual differences; as a group, boys were superior to girls. The subjects had 2 frames of orientation reference: a conventional map frame for distant places and a direct experience frame for near-by places. In conclusion, children of these ages do not know directions but compute them.—*S. W. Fernberger* (Pennsylvania).

2860. Lurie, L. A., Newburger, M., Rosenthal, F. M., & Outcalt, L. C. Intelligence quotient and social quotient. *Amer. J. Orthopsychiat.*, 1941, 11, 111-118.—The Binet IQ's of 140 problem children were compared with their SQ's as determined by the Vineland Social Maturity Scale. There were 85 boys and 55 girls ranging in age from 3 to 22 years. In general the SQ was appreciable lower than the IQ. However, children with low IQ's tend to compensate for their retardation by the development of a social maturation beyond their intellectual level, while those with high IQ's tend to overemphasize their intellectual qualities at the expense of social development.—*R. E. Perl* (Jewish Board of Guardians).

2861. Macaulay, M. The tree of life of the human personality. London: C. W. Daniel, 1940.

Pp. 29. 2s.—[Abstracted review; original not seen.] The positive and negative aspects of psychological development of man from babyhood, through childhood and adolescence, to full maturity are charted separately. Childhood conditions are believed to explain adult reactions.—*O. W. Richards* (Spencer Lens Company).

2862. McGavin, A. P., Schultz, E., Peden, G. W., & Bowen, B. D. The physical growth, the degree of intelligence and the personality adjustment of a group of diabetic children. *New. Engl. J. Med.*, 1940, 223, 119-127.—A study of 49 treated diabetic children yielded the following findings: More boys than girls tended to be below the minimum height standard; the weight of both sexes fell between the minimum and maximum standards; 6 of the children had prominent physical defects. No significant deviation in intelligence from nondiabetic children was observed. 32 of the children were considered maladjusted; the disease itself was not the only contributing factor, others being physical and intellectual defects as well as social problems. The earlier the child developed diabetes, the more readily he accepted it emotionally.—*M. Keller* (Butler Hospital).

2863. McGraw, M. B. Neural maturation as exemplified in the reaching-prehensile behavior of the human infant. *J. Psychol.*, 1941, 11, 127-141.—1904 observational and cinema records taken on 73 children were rated according to criteria based primarily on the coordination of visual and motor functioning. The criteria differentiated 6 developmental phases during the first 4 years. The ratings made it possible to find the age period when each phase was most characteristic of the reaching behavior. A longitudinal analysis of the behavior in 4 individual infants showed their development to follow the trend of the group. A tentative interpretation of the data in terms of advancing cortical function is presented.—*F. A. Mote, Jr.* (Connecticut).

2864. Murphey, B. J. What is child guidance? *Amer. J. Orthopsychiat.*, 1941, 11, 40-48.—This is a group discussion of child guidance participated in by B. J. Murphey, H. S. Lippman, S. Ackerly and R. Mellor (reported elsewhere), and A. Barhash. Murphey raises questions such as "Where does the guidance of children in the schools end, and where does professional child guidance begin? Where are we to set the limits of guidance in the home, in general medical practice, or in pediatrics?" Guidance must spread itself out, according to Lippman, for we must know the whole child in order to help him. He discusses whether or not psychoanalysis is necessary for child guidance. Barhash discusses the use of a nursery school in connection with a mental hygiene clinic. Work with parents is made considerably easier, for it seems simpler for parents to accept the help of a nursery school without becoming defensive.—*R. E. Perl* (Jewish Board of Guardians).

2865. Pellet, R. Des premières perceptions du concret à la conception de l'abstrait: essai d'analyse

de la pensée et de son expression chez l'enfant sourd-muet. (From the first perceptions of the concrete to the conception of the abstract: an attempt to analyze thinking and its expression in the deaf child.) Lyon: Bosc Frères, 1938. Pp. 399. —[Abstracted review; original not seen.] The development of thinking in deaf children is studied from the non-language level up through adolescence. The various stages of this development in normal hearing children according to Nagy, Stumpf, Decroly, Delacroix, Piaget, and others are reviewed and summarized: 1st infancy, 0-3 years, motor stage; 2nd infancy, 3-7 years, perceptual stage; 3rd infancy, 7-12 years, speculative-concrete stage; and adolescence, 12-18 years, speculative-abstract stage. Similar, but not strictly parallel stages, may be traced in deaf children: prelinguistic thinking, 0-7 years; verbal thinking, 7-13 years; conceptual thinking (concrete), 13-15 years; and logical abstraction, 15 years to adulthood. The book is divided into 4 parts in which the following aspects of the problem are treated: prelinguistic thinking in terms of images, perception, and action language; gesture and verbal language; the organization of concrete thinking; and abstract thinking and its possibilities. 120 references.—C. V. Hudgins (Clarke School).

2866. Pintner, R., Eisenson, J., & Stanton, M. *The psychology of the physically handicapped*. New York: Crofts, 1941. Pp. vii + 391. \$3.00.—The book is designed as a text for college students and for persons engaged professionally in work with physically handicapped children. In the preface the authors write: "In one sense there is no special psychology of the physically handicapped. . . . The same psychological mechanisms are at work in all cases. But any physical defect . . . presents problems to the individual in addition to the problems common to all individuals as such." The first 4 chapters deal with personality development, mental hygiene, internal mechanisms of behavior, and psychological tests for the handicapped. The remaining 8 chapters deal with the various handicapped groups. Experimental literature is reviewed and commented upon. The chapters differ in length "because of the fragmentary aspect of our psychological knowledge of some of these groups." The deaf and the hard-of-hearing are given 2 separate chapters covering 106 pages, while the remaining groups, the blind, the partially sighted, the crippled, "other physically handicapped groups," and speech defects are covered in 156 pages. The authors of the individual chapters are indicated in the preface. A comprehensive bibliography follows each chapter.—C. V. Hudgins (Clarke School).

2867. Skard, Å. G. *Barn i vardagslivet*. (Children in everyday life.) Stockholm: Natur och Kultur, 1940. Kr. 6.75.—[Abstracted review; original not seen.] This is a nontechnical exposition of child development from infancy through school

age, including treatments of the various difficulties which will arise in regard to education and training. It is stressed that knowledge of the developmental stage of the child is essential for correct treatment.—M. L. Reymert (Mooseheart Laboratory for Child Research).

2868. Skinner, C. E., & Harriman, P. L. [Eds.] *Child psychology; child development and modern education*. New York: Macmillan, 1941. Pp. xii + 522. \$3.00.—This textbook, written with a minimum of technical display, is prepared for use in normal schools, teachers colleges, and departments of education; its use as a guide for parents has been kept in mind. In addition to the typical chapters there are sections devoted to: aesthetic experience in childhood; play life of children; the exceptional child; the psychoeducational clinic; and child development through education. In addition to the author-editors the following persons have contributed to the book: A. F. Arey, L. A. Averill, L. E. Bixler, E. A. Bond, J. W. Charles, L. D. Crow, R. M. Drake, C. Hisson, C. E. Ragsdale, G. Ridsen, J. J. Smith, and B. E. Tomlinson. A detailed outline of the book by R. M. Drake, consisting of 44 pages, is included in the appendix.—D. B. Lindsley (Brown).

2869. Várkonyi, H. *A gyermekkor lélektana*. Vol. II: A 6 ik—12 ik év. (The psychology of childhood. Vol. II: The ages from 6 to 12.) Szeged: 1940. Pp. 275.—The uniqueness and unity of personality are stressed, and the empirical approach is advocated. In 19 chapters the following topics are treated: the second phase, ages from 6 to 12; physical development; perception; thought and concept formation; imagination; dreams; memory; interests and attention; intelligence; learning; play; reading; emotion; motivation and values; moral judgment; sexuality; social behavior; religion; and personality. Bibliography of 8 pages and index. (See XIII: 2772.)—P. Ranschburg (Budapest).

2870. Weinbach, A. P. *Some physiological phenomena fitted to growth equations. IV. Time and power relations for a human infant climbing inclines of various slopes*. *Growth*, 1940, 4, 123-134. —(Biol. Abstr. XV: 8363).

2871. Yamazaki, S. [The psychical attitudes of youths towards death.] *Jap. J. Psychol.*, 1940, 15, 469-475.—R. Kuroda (Keijo).

2872. Zachry, C. B. *The child's emotional and social adjustment*. *Proc. 6th Conf. Child Res. Clin. Woods Sch.*, 1940, 8-15.—Social and emotional training of the child must be accomplished through situations which he can understand. The adult should give the child security and sympathy without erring in the direction of over-protectiveness.—F. W. Finger (Brown).

[See also abstracts 2558, 2598, 2647, 2700, 2724, 2840.]

